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PROGRESS AND PROBLEMS IN THE REASSESSMENT OF BOETHIUS

DECENT RESEARCH in medieval philosophy has centered mainly about the high period of Scholasticism. The work which has been done with regard to earlier thinkers is of a somewhat preliminary nature, pending the settlement of many problems in textual criticism and intellectual history which do not come exclusively within the field of the historian of philosophy. In order to determine more precisely the origins of Scholasticism, the thought of St. Augustine has been subjected to thorough examination in its many aspects. Von Hertling's pioneer efforts in classifying and evaluating the citations from Augustine to be found in the works of Aquinas have proven useful to all subsequent investigators. In another of his fundamental comparative studies, von Hertling remarked that, after Augustine, the greatest authority for the early Scholastic age is Boethius—a judgment which has been repeated with approval in most general accounts of the Scholastic movement.1 Although Boethius is thus accorded an honored place in the development of phi-

Descartes' Beziehungen zur Scholastik ("Sitz. d. philos. philol. u. hist. Klasse d. bayer. Akad. d. Wiss.," Munich, 1899), p. 25. Among general accounts of Boethius in standard works, cf. especially O. Bardenhewer, Geschichte der altkirchlichen Literatur (Freiburg i. B., 1932), V, 250-64; M. Cappuyns, "Boèce" Dictionnaire d'historie et de géographie ecclésiastiques (Paris, 1937), IX, cols. 348-80; M. De Wulf, History of Mediaeval Philosophy (3rd Eng. ed.; New York, 1935), I, 106-14; E. Duckett, The Gateway to the Middle Ages (New York, 1938), chap. iv; Gilson and Böhner, Die Geschichte der christlichen Philosophie (Paderborn, 1937), pp. 221-39; M. Manitius, Geschichte der lateinischen Literatur des Mittelalters, B. IX, Abt. II, T. I of Handbuch der klassischen Altertumswissenschaft (Munich, 1911), pp. 26-36; U. Moricca, Storia della letteratura latina cristiana (Turin, 1934), Vol. III, Part II, pp. 1203-10 (bibliog.), 1270-1307; Pauly and Wissowa, Realencyclopädie der classischen Altertumswissenschaft (Stuttgart, 1897), Vol. V, cols. 596-601; Schanz and Krüger, Geschichte der römischen Literatur (Munich, 1920), IV, Part II, 148-66; Ueberweg and Geyer, Die patristische und scholastische Philosophie, Part II of Grundriss der Geschichte der Philosophie (11th ed.; Berlin, 1928), pp. 135-38, 669-70 (bibliog.).

losophy as "the last of the Romans and the first of the Scholastics," the number of philosophical studies devoted to his thought is surprisingly disproportionate with his acknowledged importance. The hewing of wood has been left for the most part to the philologists, the historians of patristic and medieval literature, and the theologians. In the years immediately preceding the second World War, however, philosophers from several countries began directing their attention to Boethius in order to prepare the way for a definitive revaluation of his doctrine, its sources, and its later influence. This summary account of some of the more noteworthy advances in this field is also intended to indicate some points where further investigation is necessary if we are to make a just estimate of the great minister of Theodoric whose cult was authorized under the name of St. Severinus Boethius for the diocese of Pavia by Pope Leo XIII.

I. THE LITERARY PLAN OF BOETHIUS

For all the forbidding austerity of his scientific commentaries and treatises, Boethius did not fail occasionally to include charming personal asides, some of which are of more than literary interest. He allows us to see himself sweating endlessly over his arduous projects, and he seldom fails to point out the sort of readers for whom a book is intended and the friend to whom it is dedicated. The first commentary upon Porphyry's Isagoge is composed in dialogue form as the record of a midnight conversation which took place between Boethius and a young student friend, Fabius, during a Christmas vacation which they spent together at a villa in the Aurelian mountains. In his next work, we pass from this Augustinian setting (reminiscent of the mise-en-scène of the De Ordine) to the court of Theodoric the Goth, under whom Boethius served as sole consul in the year 510. He tells us that his labors upon the Categories of Aristotle were interrupted during that year by his consular duties, although he felt a truly Roman civic responsibility for bringing Greek wisdom to his countrymen, as once his predecessors in office had brought Greek lands under Roman rule.2 To this fortunate reference we owe one of the two incontrovertible dates for determining the chronology of Boethius' writings, the other date being that of his imprisonment (523-24), during which he composed the Consolation of Philosophy.

In order to locate the other works more exactly, the philologist, S. Brandt, continued the search for cross-references made by Boethius himself to his various productions. By means of this internal criticism, the writings were chronologically ordered in a series corresponding quite closely to the literary plan which Boethius had

² In Cat., 1. II; PL, LXIV, 201B.

gradually formulated as a guide to his scholarly endeavors.3 In one of the eulogistic, yet practical, letters which Cassiodorus composed in the name of Theodoric, Boethius is praised for having entered the art of noble disciplines or philosophy "through the fourfold doors of learning," a metaphorical expression closely allied with the term quadrivium, which was coined by Boethius to designate the study of arithmetic, music, geometry, and astronomy.4 Having provided the basic texts for these studies through his translations and abridgements of the Greek authorities on mathematics and music, the great educator then turned his attention to Porphyry's introductory treatise and to the logical writings of Aristotle. As outlined in a well-known passage in his second commentary on the Perihermenias,5 the ambitious goal which Boethius set himself was nothing less than the translation and commenting upon the complete text of Aristotle and Plato. He also hoped to show their basic agreement upon the most important philosophical questions, announcing his firm opposition to those scholars who strove only to emphasize the points of difference between the two masters of his own intellectual formation. Although the duties of his official life and the ill turn of fortune prevented Boethius from executing this grandiose scheme worthy of an Albert or a Thomas (or, perhaps, from realizing its impossibility), he did render most of the Organon into Latin along with his own commentaries. There is also evidence that he commentated upon the Physics and other works of Aristotle. Brandt's parallelism between the chronological and logical ordering of the extant works has been accepted by most later scholars, although McKinlay would place the De Institutione Musica in a later period on the basis of his stylistic tests.6

A most serious challenge to Brandt's findings was offered in a paper contributed by A. Kappelmacher to the Wilamowitz-Moellendorff volume of Wiener Studien. Considering as certain the assign-

(1928).

³ Brandt presented his conclusions in "Die Entstehungszeit und zeitliche Folge wer Werke von Boethius," *Philologus*, Vol. LXII (1903).

4 Cassiodorus, *Var.*, I, 45; for the political and literary importance of Cassiodorus, cf. A. van de Vyver, "Cassiodore et son oeuvre," *Speculum*, Vol. VI (1931). Boethius himself used the word "quadruvium," *De Inst. Arith.*, ed. G. Friedlein (Leipzig, 1867), I, 1, p. 7, 1. 25; p. 9, 1. 28.

5 In Periherm., ed. sec., Lib. II, cap. 3, ed. K. Meiser (Leipzig, 1877), Vol. II, p. 79, 1. 9 to p. 80, 1. 6.

6 Following the lead of E. Rand, *Der dem Boethius zugeschriebene Traktat De Fide Catholica*, supplementband XXVI to *Jahrbücher für klassische Philologie* (Leipzig, 1901), pp. 436-38; A. McKinlay, "Stylistic Tests and the Chronology of the Works of Boethius," *Harvard Studies in Classical Philology*, Vol. XVIII (1907), sought to establish the chronology on the basis of a statistical study of vocabulary and style. McKinlay reaffirms and extends his conclusions study of vocabulary and style. McKinlay reaffirms and extends his conclusions in "The De Syllogismis Categoricis and Introductio ad Syllogismos Categoricos of Boethius," Classical and Mediaeval Studies in Honor of Edward Kennard Rand, ed. L. Jones (New York, 1938).

""Der schriftstellerische Plan des Boethius," Wiener Studien, Vol. XLVI

ment of Boethius' commentary on the Topics to a date earlier than that of the commentary on the Posterior Analytics, Kappelmacher remarked that here Boethius had departed from the logical sequence of presenting Aristotelian doctrine. Hence he concluded that the literary plan set forth in the commentary on the Perihermenias was not a binding one to which Boethius adhered in a rigidly mechanical fashion. In his Lowell Lectures for 1928, the eminent Boethian scholar, E. K. Rand, also warned against imagining that Boethius drew up a complete program even before he began writing.8 Yet there is nothing incongruous or inconsistent in the procedure of Boethius, who abandoned the dialogue-form of his first commentary on the Isagoge and the Latin text of Marius Victorinus for a more scientific method of analysis based upon his own translation. This change was made in the interests of sound scholarship and sound pedagogy. And Rand notes that if Boethius did turn aside from his logical studies to write treatises upon the liberal arts, this was only an apparent deviation, a consolidating moment in the development of the literary production rather than its retardation. For the liberal arts were intimately associated with the philosophical disciplines, and were treated by Boethius precisely for their bearing upon the philosophical formation of the mind.

Even though the commentary on the Topics did not appear in the order prescribed by Aristotle, this is not sufficient reason for dismissing Boethius' general plan as a superficial one which did not govern his literary activity at all. It was one which took shape only gradually in his mind, and one of which he was ever the master rather than the servant. But it served its worthy purpose of providing a broad frame of reference in the midst of the meticulous labors of translating, commenting, and writing textbooks. Nor was it an irrelevant move for Boethius to offer his interpretation of the Topics of Cicero, his favorite Latin author. For both the duty of not neglecting what came later to be known as the trivium and the courtesy due to the request of his friend, Patricius, led him to comment upon this work and to compose his own treatise De Differentiis Topicis, which is also mainly rhetorical in content.9 The genial character of Boethius, as well as his inexhaustible industry and versatility, is displayed here. It is not improbable, moreover, that it was out of an impatient desire to use his logical instruments in the properly philosophical field of the first degree of abstraction that he wrote upon natural philosophy even before his logical program had been completed. The resolution of the textual and literary

⁸ Founders of the Middle Ages (Cambridge, 1928), p. 146. ⁹ Boethius remarks at the beginning of his Com. In Top. Cic. (PL, LXIV, 1039D-1041A), that it is out of friendship for "the very skilled rhetorician, Patricius," that he is writing the work which was requested of him.

problems raised by the commentary on the Categories awaits the appearance of the critical edition announced by the editors of the Vienna Corpus.

II. THE PLACE OF BOETHIUS IN THE HISTORY OF LOGIC

Our historical conception of ancient and medieval logic is still shaped in large measure by the thesis expounded in K. Prantl's monumental History of Logic in the West, which first appeared in 1855-70.10 Although numerous monographic studies have appeared since that date, correcting its findings in particular matters, no work of similar scope has provided the general revision of Prantl's governing notions which is demanded by the advance of scholarship. Both the strength and the weakness of Prantl's outlook are manifest in his treatment of Boethius, whose pivotal position in the transition from Grecian to Medieval Latin logic is fully acknowledged. Boethius himself is treated as one of the epigoni whose "cookbook" compilations laid a mortiferous hand upon the spirit of Greek logic, entombing it for a thousand years in the sterile formulas and disputes of the School. Although his animus towards all things medieval led him to this harsh verdict. Prantl also signalized certain contributions undeniably made by Boethius to the advance of logic.11 Terms and expressions like contingens, subjectum, praedicatum, conversio per accidens et principaliter are given a technical signification for the first time in Latin by Boethius. Many words commonly used in Latin were given a fixed logical sense by him, and it is to him that we owe our designation of the four forms of the categorical judgment. His development of the hypothetical syllogism is praised by Prantl, although the formalism of the treatment is censured.

The long shadow cast by Boethius over the following centuries through his translations, commentaries, and treatises in the field of logic is seen in Prantl's division of the history of medieval logic into two periods, characterized respectively by a fragmentary knowledge of Boethius during the first or Boethian period lasting from Isadore of Seville to the thirteenth [sic] century, and by a gradual recovery of the entire Boethius and the new Aristotelian translation which marked the later phase of Scholasticism.¹² There is scarcely a page

12 Gesch. der Logik, II, 4, 99, 264.

¹⁰ Geschichte der Logik im Abendlande (4 vols., Leipzig, 1855-70; Vol. II, 2nd ed., Leipzig, 1855; reprint of the work, Leipzig, 1927). Some of Prantl's shortcomings have been discussed and remedied in the foreword and text of H. Scholz, Geschichte der Logik, Vol. IV of Geschichte der Philosophie in Längsschnitten (Berlin, 1931).

11 Op. cit., I, 679-722. For the threefold use of "contingere" and "contingens" in the commentaries on the Periherm., cf. the valuable philological study by A. Becker-Freyseng, Die Vorgeschichte des philosophischen Terminus 'contingens' ("Quel. u. Stud. z. Gesch. u. Kult. d. Alt. u. d. Mittelalt.," Vol. VII [Heidelberg, 1938]), and the literature cited there.

12 Gesch. der Logik. II. 4. 99. 264.

of text or of footnotes in the second volume of the *History* which does not contain some reference to Boethius either by the author or by the medieval authorities whom he cites so profusely. Despite his questionable interpretations, Prantl remains unsurpassed in the wealth of source material assembled to illustrate the development of logic. A revised history of medieval logic might almost be made from the footnotes in his own treatise! And the rise and decline of Boethius' reputation among the Schoolmen could be charted from an analysis of the medieval texts which cite his authority on disputed points.

Later scholars have attempted to determine more precisely the relation of Boethius to his sources and the extent of his influence upon later logicians. He is his own best guide in indicating the masters whom he follows. Aristotle's Organon and Porphyry's Isagoge were considered by Boethius to be the indispensable foundations of all logical training, and these works he sought to convey to "Roman ears." In his commentaries and independent treatises are frequently mentioned the names of Andronicus, Aspasius, Alexander of Aphrodisias, Themistius, and Syrianus. Although he did not neglect his own Latin philosophers and men of letters, Boethius is mainly endebted to the great tradition of Greek commentators which continued to flourish during his own lifetime. Comparative studies have shown that he took his place in this line, performing his task faithfully but without the degree of originality that was formerly ascribed to his achievements. Porphyry's modern biographer, J. Bidez, has ascertained philologically the intimate acquaintance which Boethius had with the teachings of Porphyry.¹³ As was customary for him, Boethius planned two commentaries on the Categories of Aristotle, an elementary one for beginners in philosophy, and a more advanced one in which the various special problems were to be treated at greater length, more profoundly, and in the light of the conflicting views of the various expositors who had preceded him. Unlike the case of the Perihermenias, this project was never completed, or at least there is now no trace of the more mature commentary. The one which is in our possession is admittedly based upon Porphyry, who recommended himself to Boethius at this point for the comparative simplicity and clearness of his explanation. Bidez has shown is that the Boethian work is little more than a paraphrase of the second commentary which Porphyry himself devoted to the Categories. Indeed, a tentative reconstruction of the imperfect text of Porphyry's Κατά πεῦσιν has been offered by Bidez on the basis of Boethius' Latin work. The modifications introduced by the latter are mostly of a literary sort: the substitution of a continuous text for the dialogue form of the Greek original, slight

^{13 &}quot;Boèce et Porphyre," Revue belge de philologie et d'histoire, Vol. II (1923).

changes in definitions in order to fit the requirements of Latin, the substitution of allusions to familiar figures and authors in Latin literature for Greek references, and insignificant shifts in the examples employed. No advance in doctrinal matters was noticed by Bidez, for at least in this introductory treatise Boethius was content to present his readers with an interpretation closely adhering to the text of Porphyry.

Even more far-reaching consequences have ensued from an examination of Boethius' most valuable commentaries, that of Porphyry's Isagoge and those on the Perihermenias of Aristotle. The impact of Neoplatonic doctrines upon Boethius was not confined to his works of popularization, nor did he rely only upon authors of the past. The direct influence of the contemporary Neoplatonic school at Alexandria upon Boethius has been detected by P. Courcelle, who has studied the logical writings and the Consolation of Philosophy from this standpoint.14 Although there is no solid foundation for the legend that Boethius was educated in Athens, his doctrines do corroborate the testimony of Cassiodorus that he was deeply learned in the Athenian schools, i.e., in Greek philosophy. Not only the classical masters but also men who were almost his own contemporaries figured in his works, although he maintained a conventional silence concerning thinkers of his own day. Explicit mention is not necessary, however, to establish some sort of intellectual commerce between the Roman consul and the Greek philosophical currents of his time. After the death of Proclus in 485 (five years after Boethius' own birth), the Neoplatonic school at Athens went into a final decline, to be succeeded by that at Alexandria under the leadership of Ammonius, the son of Hermias. The Christian and pagan students of Ammonius men like Simplicius, Olympiodorus, and John Philpon-constituted the last generation of Greek commentators, a brilliant generation which was contemporaneous with Boethius. That he also was dependent upon Ammonius is indicated by the numerous parallel passages which Courcelle has cited. The order in which Boethius proposed to comment upon Porphyry and Aristotle is the one recommended by Ammonius. The famous six points which must be sought in every analysis of a work are common to both thinkers, 15 and were This mebequeathed by Boethius to the medieval commentators.

^{14 &}quot;Boèce et l'école d'Alexandrie," Ecole française de Rome: Mélanges d'archéologie et d'histoire, Vol. LII (1935); cf. also the summary of Courcelle's thesis, "La Consolation de Boèce," Ecole nationale des chartes (Paris, 1934), pp. 43-47. The filiation of Boethius with Ammonius on the question of divine prescience and human freedom was noted independently by H. Patch, "Necessity in Boethius and the Neoplatonists," Speculum, X (1935), 401, text and n. 3.

15 Ammonius, In Isag., ed. Busse, in Comm. Arist. Graec., IV, 3, p. 21, 11. 6 ff.; Boethius, In Isag., ed. prima, I, 1, ed. S. Brandt (CSEL, Vienna, 1906), XXXVIII, p. 4, 1. 17 to p. 5, 1. 10; Courcelle, "Boèce et l'école d'Alexandrie," loc. cit., pp. 192-93. Brandt noticed this relation in his edition of Boethius' commentary. It is significant that a careful analysis of the text of St. Thomas'

thodical textual treatment of Aristotle did not reappear in the West until Aquinas' scientific commentaries replaced the loose paraphrases of Albert. Boethius is in doctrinal accord with the leader of the Alexandrine school on such hotly debated questions as the nature of logic as an instrument and as a genuine part of philosophy, the reconciliation of divine prescience, contingent judgments, and human freedom, and especially on the distinction between perpetuity and eternity and the compatibility of a perpetual universe with a first cause. On this latter issue, Courcelle has shown that Boethius took the side of Ammonius against the overzealous attack of some of the latter's Christian students, who denied that a universe without temporal beginning is reconcilable with a caused universe. Christian humanism found a worthy exponent in Boethius, who anticipated the courage of St. Thomas in having recourse to the truths of pagan philosophy in order to secure the natural foundations of Christian belief, without fear of finding a contradiction between faith and reason. The soundness of the method of the First of the Scholastics is testified by the unrivaled eminence of his name and doctrine during the early period of Scholasticism. Studies in the manuscript tradition by Grabmann, Geyer, Van de Vyver, and others have established the wide circulation of the Boethian Corbus, the surviving examples of which rival Augustinian works and the Bible in their extent, number, age, and completeness.16

III. BOETHIUS ON MATHEMATICS AND MUSIC

The modern revaluation of Boethius' mathematical works dates from textual studies in the writings traditionally ascribed to him in this field, and especially from M. Cantor's well-known Lectures on the History of Mathematics. 17 Boethius' treatise on arithmetic, which

commentary on the *Pertherm*. revealed that Boethius and Ammonius are the commentators most frequently cited, and are the only ones upon whom Aquinas draws for a report upon the opinions of others; cf. L. Lachance, "St. Thomas dans l'histoire de la logique," *Etudes d'histoire littéraire et doctrinale du XIIIe siècle* ("Publications de l'Institut d'études médiévales d'Ottawa," I [Paris, 1932]), 65-71. commentary on the Periherm. revealed that Boethius and Ammonius are the

16 These researches were summarized in their bearing upon Boethius by A. van de Vyver, "Les étapes du developpement philosophique du haut moyen-âge," Revue belge de philologie et d'histoire, Vol. VIII (1929), in which announcement was also made (p. 443, n. 2) of a work in preparation on the life, work,

and tradition of Boethius by van de Vyver.

¹⁷ Mathematische Beiträge zum Kulturleben der Völker (Halle, 1863), pp. 176-230; Vorlesungen über Geschichte der Mathematik (3rd ed.; Leipzig, 1907) In 170-230; Vorlesungen über Geschichte der Mathematik (3rd ed.; Leipzig, 1907). I, 573-92. For more recent estimates in general agreement with Cantor, cf. E. Bell, The Development of Mathematics (New York, 1940), pp. 82-84 (in a satirical chapter on "The European Depression," i.e. the Middle Ages); F. Cajori, A History of Mathematics (2nd ed.; New York, 1919), pp. 67-68; E. Hoppe, Mathematik und Astronomie im klassischen Altertum (Heidelberg, 1911), pp. 430-32 pp. 430-32.

was to become the textbook on that subject for the Middle Ages, is derived expressly from the introductory manual written by Nicomachus of Gerasa. Boethius forged an important link between classical and medieval mathematics through his translation of this work, abridging and expanding certain parts in conformity with his pedagogical purposes. Cantor observes that Boethius' Greek was sufficient for translating purposes, but not for grasping the mathematical conceptions of Nicomachus. His treatise served to fix Latin mathematical terminology in many cases, but Cantor claims that Boethius omits some of the most essential sections and misunderstands other passages.

This adverse verdict received widespread acceptance, and has been repeated quite uncritically in later histories of mathematics and in studies on Boethius. More recently, however, the case has been reviewed by the American mathematician, F. Robbins, in his studies accompanying the English translation of Nicomachus. 18 Robbins finds that the succinctness of the Greek text is indeed lost in the numerous explanations and numerical examples inserted by Boethius into his version. But Boethius does convey with sufficient accuracy the meaning of the original, except in a few unimportant instances where he omits certain technical terms of Pythagorean logic. None of the propositions which Cantor claimed Boethius to have overlooked are in fact omitted, and all that is best in Nicomachus is conveyed by Boethius. Such was his faithful adherence to his model that Robbins censures him only for a lack of originality and progressiveness, combined with too great prolixity. This difference of estimate by authorities in the history of mathematics should caution students of Boethius against drawing definitive conclusions on the basis of the present inconclusive state of evidence.

The choice of a Neo-Pythagorean authority in arithmetic was of great consequence for medieval thought, since Boethius' treatise proved to be one of the main sources for the theological number-speculation which flourished at Chartres in the twelfth century. From Nicomachus Boethius derived many characteristically Pythagorean and Neoplatonic notions on the power of number, which met with welcome response at this medieval center of liberal training where the authority of the martyred Anician carried great weight. As a leading investigator in the history of the Chartrian school remarks, the twentieth chapter of the first book of the De Institutione Arithmetica, with its discussion of the generatio autem procreatioque of perfect numbers, might well have been composed by a twelfth-cen-

¹⁸ Nicomachus of Gerasa, Introduction to Arithmetic, trans. by M. D'Ooge, with studies by F. Robbins and L. Karpinski (New York, 1926), pp. 132-37 (chap. ix was written by Robbins).

tury author.19 Thierry of Chartres and Clarenbaldus of Arras developed a theology of number which drew inspiration from the Boethian and Augustinian notions of the divine unity, the primal fecundity of unity (which is all number in potentiality), and the reconciliation of multitude with simplicity. There are traces of a theological application of this number-speculation in Boethius' De Trinitate, where the divine simplicity is contrasted with the necessary notes of composition and multiplicity found in all creatures. And considerable impetus was given to the deductive treatment of theological difficulties by the method of proof from concepts and axioms which is set forth in the third of the Sacred Tractates, the so-called De Hebdomadibus. It has been well said that this opusculum represents avant la lettre the method of demonstration more geometrico, a pathfinding anticipation of the procedure of Alan of Lille, Raymon Lull, and even Spinoza.

At Chartres, the Pythagorean and Platonic heritage of Boethius came to its full flowering in a form of Christian humanism whose outlines have not vet been firmly delineated. Foremost among the disputed points is the alleged pantheism of the Chartrian school. Although this problem has not been unquestionably settled in the negative by Gilson and De Wulf, it should nevertheless be acknowledged that the method of solution proposed by De Wulf is a sound and fruitful one. This consists in a study of the Chartrian texts relative to the participation of form and being by creatures in the light of the Boethian doctrine on esse, to which the Chartrian realists subscribed. From this standpoint De Wulf maintains that. allowance being made for the figurative language in which their theories were sometimes clothed, the philosophers at Chartres were concerned with being in the order of essences and with essential participation in the divine perfection.²⁰ This interpretation is based. however, upon Brosch's supposition that the Boethian esse and quod est formally exclude every reference to existence. That Brosch's thesis has not gone unchallenged will be pointed out presently.

The most recent student of the Chartrians, J. Parent, has emphasized the formative influence of Boethius upon the spirit and doctrines of this school,21 for it was from him as well as from Augustine that the ideal of utilizing Plato for Christian purposes was derived. The exceptional place which Boethius occupied at Chartres is reflected

¹⁹ De Inst. Arith., I, 20, ed. cit., pp. 41-45; cf. W. Jansen, Der Kommentar des Clarenbaldus von Arras zu Boethius De Trinitate ("Breslauer Studien zur historischen Theologie," VIII [Breslau, 1926]), 122.

20 The literature on this controversy is summarized by M. De Wulf, "Le panthéisme chartrain," Aus der Geisteswelt des Mittelalters ("BGPTM," Supplementband III [Münster i. W., 1935]).

²¹ La doctrine de la création dans l'école de Chartres ("Publications de l'Institut d'études médiévales d'Ottawa," VIII [Paris, 1938]), esp. 19, 111-12, and chap. v.

in the numerous commentaries upon his works, in the attention which was paid to terminological problems encountered in reading him, in the use of pagan sources and the defense of human values, and in the rational treatment of matters of faith. Both the antique and the Scholastic elements in Boethius were accepted, but in harmony with the dominant tendencies at Chartres it was a Platonic rather than an Aristotelian Boethius who was adopted. In attempting to vindicate Thierry of Chartres from the charge of pantheism made against him by Clerval and Jansen for his designation of God as forma essendi, Parent returns to the Boethian use of this term. Thierry seeks to preserve the transcendence of God as well as His immanence to creation by teaching that the forms present in material things should not be confounded with their divine patterns. The basis for this difference is the sharp distinction which Boethius drew in the De Trinitate between the completely immaterial form of God and the quasi-forms or images which are constitutive principles of created reality in union with matter. The formal essences of things are modelled upon the divine essence, but in God all forms are gathered into the divine simplicity and are totally disengaged from matter. Hence Parent would base his case for Thierry upon a formal and essentialist interpretation of the Boethian esse, and upon an exemplarist view of the relation between the divine form and created forms. While heeding R. Allers' prudent warning not to consider the question settled beyond all dispute,22 we must nevertheless recognize that the teaching of the Chartrian School is made clearer when considered as a variety of Christian Platonism largely inspired by Boethian concepts.

Boethius' reputation in music has in recent times suffered as serious an eclipse as has his standing in the history of mathematics. In his work on *The Tradition of Boethius*, H. Patch reminds us that the treatise *De Institutione Musica* held an honored place in the curriculum of the medieval schools and universities as one of the normal requirements in the Arts course.²³ The use of Boethius on music survived at the English universities far into the modern era. But the fallen estate of his authority in this field is felt in the remark of a present-day Oxford don, whom Rand quotes as observing that the *De Institutione Musica* is about as much use to the modern musician as Newton's *Principia* is to a dancer. One is tempted to ask whether the dancer in question is a modern one, and whether the *Principia* is still of use to modern physicists. But in any case, recent historians of music hold Boethius in far less esteem than did his medieval followers. This is partially due to a more careful study

²² R. Allers, "Microcosmus from Anaximandros to Paracelsus," Traditio, II (1944), No. 183, 382; on Boethius, cf. pp. 375-76.

²³ The Tradition of Boethius (New York, 1935), pp. 38-39.

of the sources upon which Boethius himself declared his dependence. These included Pythagoras, Aristoxenus, Claudius Ptolemaeus, and above all that same Nicomachus of Gerasa whose *Arithmetic* served as the basis for Boethius' textbook on that subject. Most of the musical theories advanced by Boethius can be traced to Nicomachus, although comparative study is hindered by the loss of the complete text of the latter's work on music.²⁴

The judgment passed upon Boethius by H. Abert, in one of the first surveys of medieval music, has been generally allowed by students in that field.²⁵ These scholars stress the incalculable importance of Boethius and Cassiodorus for the preservation and cultivation of music in the Middle Ages, which derived its knowledge of Greek musical forms from these sixth-century educators. The greater the role accorded to music in Christian liturgy, the more pressing was the need for providing music with a theological foundation and a philosophical explanation consonant with the Christian religious outlook. Although an explicit admission of this theological preoccupation is characteristically absent from Boethius, the Greek theories which he selected for transmission to the Latin West emanated from the religious-mystical schools at Alexandria which had emphasized the religious significance of music. In music no less than in logic and metaphysics, Boethius sought to appropriate for Christian wisdom the sounder elements in late Pythagorean and Platonic philosophy. Boethius was imbued even more than Cassiodorus with the antique view of music. His admiration for the shadowy figure of Pythagoras was bequeathed to his readers, and throughout the Middle Ages Pythagoras appears as a legendary personage in musical and mathematical literature. The historians of music are particularly severe upon Boethius, however, for partially misunderstanding his sources. for treating music in an excessively theoretical way as a sub-division of mathematics, and consequently for his neglect of its practical aspects. Thus they point out that the examples which he did adduce were borrowed in a bookish and anachronistic way from ancient treatises, finding no counterpart in the actual musical practice of his own day.

²⁴ A provisional edition was prepared by G. Friedlein, along with his edition of the work on Arithmetic: A. M. T. S. Boetii De Inst. Arith. lib. duo, De Inst. Mus. lib. quinque (Leipzig, 1867). A German translation of the De Inst. Mus., with explanatory notes on Greek harmony, was prepared by O. Paul, Boetius und die griechische Harmonik (Leipzig, 1872). For a preliminary study of the sources, consult W. Miekley, De Boethii Libri De Musica Primi Fontibus (Jena, 1898). A more extended investigation is being made by R. Bragard, who is also editing the text of De Inst. Mus. for the Vienna CSEL.

²⁵ Die Musikanschauung des Mittelalters und ihre Grundlagen (Halle, 1905), pp. 7-16, 136-37, 164-66. Among the later works, cf. H. Besseler, Musik des Mittelalters und der Renaissance (Potsdam, 1931), pp. 42-44; T. Gerold, La musique au moyen âge (Paris, 1932), pp. 66-67.

In line with the number-symbolism and cosmic speculation of the Neo-Pythagorean and Neoplatonic circles to which Nicomachus belonged, Boethius treated music from a mathematical standpoint, as dealing with number and multitude ordered according to certain proportions. It is difficult to see why such a formal "scientific" treatment should violate the nature of music any more than do the many specialized studies of its particular aspects to which we are accustomed today. Part of the misunderstanding of the attitude of Boethius towards music has a philosophical rather than a strictly musical basis, as has been demonstrated by G. Pietzsch in a remarkable essay which applies C. Baeumker's conception of medieval philosophy to medieval musical theory.26 Pietzsch noted that Abert's view of medieval music was predetermined by a depreciative notion of the Middle Ages and of the "extra-musical" considerations which are found in medieval treatises on music. The preponderantly speculative approach of Augustine, Boethius, and later writers on music was integrated with the general effort to orientate Greek learning and culture in a direction acceptable to Christian belief. Hence the theoretical emphasis of Boethius was not based upon a depreciation of musical practice, but upon the recognized need of providing for Christian music a sound philosophical foundation.

The Boethian classification of music into musica mundana, humana, and instrumentalis was a theoretical one rather than a practical division. It is only by overlooking the speculative nature of this classification that it could be called illogical by Abert for failing to include vocal music along with musica instrumentalis. The third class of music, quae in quibusdam constituta est instrumentis, refers to the tools employed by the theoretician of music in studying the nature of musical sound, rather than to the means employed practically in the art of instrumental music. This distinction between music as an art and as a scientific discipline was basic to the Boethian conception of music, and is appreciated by the most recent historians of music.27 The threefold division was not the only one current in medieval times, but it was generally accepted over a span of eight centuries until the introduction of the Aristotelian writings on natural philosophy rendered doubtful for fourteenth-century writers the reality of musica mundana. Cosmic harmony included the music of the spheres,28 the union of the four elements, and the alternating

²⁶ Die Klassification der Musik von Boetius bis Ugolino von Orvieto (Halle, 1929), esp. the introd. and pp. 39-44; cf. also Pietzsch's Die Musik im Erziehungs-und Bildungsideal des ausgehenden Altertums und frühen Mittelalters (Halle, 1932).

⁽Halle, 1932).

27 Cf. P. Láng, Music in Western Civilization (New York, 1941), p. 61; G. Reese, Music in the Middle Ages (New York, 1940), p. 118.

28 Cf. R. Bragard, "L'Harmonie des sphères selon Boèce," Speculum, Vol. IV (1929).

course of the seasons. From these latter two instances it is evident that for Boethius music was treated primarily as a form of numerical orderliness and correlation which need not be limited to audible or even sonorous phenomena. The microcosmic harmony within man is displayed in the wondrous union of body and soul, and in the coordination of the soul and the human bodily elements. Following Nicomachus and the Pythagoreans, Boethius professed a correspondence between the sounds emitted by the strings of the lyre and the music of the spheres, for it is upon the model of the musica mundana that all sensibly perceptible music is to be patterned. Only reason, however, can perceive the mathematical structure underlying this analogy. It is under reason's guide that audible music is to perform its proper function of bringing man into harmony with the universal order of things. Hence the composer and the player of music are strictly subordinated by Boethius to the musical critic or theoretician, from whose standpoint alone is musica instrumentalis studied in the auadrivium.

Boethius was not ignorant of the powerful effect which music has upon the sensibility and character of men of every age and condition. Indeed, it was in an attempt to grasp the cause and method of this molding influence by understanding the inner laws of harmony that he wrote his treatise on music. Something survived here of the Platonic teaching upon the moral and educational office which belongs to music, for no extreme opposition was erected by Boethius between musical theory and practice. In two studies upon this problem, L. Schrade has suggested certain far-going revisions which ought to be made concerning the relation established by Boethius between the quadrivium and philosophy.29 The same mélange of Platonic and Aristotelian elements which marks the musical teaching of Nicomachus and Ammonius is also found in the Boethian conception of music. In his early writings on arithmetic and music, Boethius treated the quadrivium as a preparation for philosophy, rather than as an integral part of it. From this standpoint, he stressed the ethical function of music as propaedeutic to a formal knowledge of being. Following the doctrine of the seventh book of the Republic that the study of music gives insight into the numerical laws governing the structure and movements of all bodies. Boethius maintained that a mind disposed by this musical ethos is sufficiently detached from unreflective experience to engage in philosophy itself, the cumulus perfectionis. Included under the broader discipline of "mathematics," music helped to sharpen the soul and to elevate it beyond ontic ap-

²⁹ "Das propädeutische Ethos in der Musikanschauung des Boethius," Zeitschrift für Geschichte der Erziehungs und des Unterrichts, Vol. XX (1930); "Die Stellung der Musik in der Philosophie des Boethius als Grundlage der ontologischen Musikerziehung," Archiv für Geschichte der Philosophie, Vol. XLI (1932).

pearances to the study of being in its true state. This view of music as a science of the harmony of number having a salutary effect upon the eye of the mind, unites the intellectual formation provided by mathematics with an appreciation of the world of harmony and tone. It emphasizes the didactic role of music as directing the mind to the intelligible appearances of being, and so as fitting the soul for philosophy.

In the more objective scientific division of philosophy offered by Aristotle, mathematics finds a place among the speculative philosophical disciplines themselves. This classification prevailed in the later works of Boethius. Although he did not treat music separately subsequent to the De Institutione Musica, he presumably included it along with mathematics as a branch of philosophy. Boethian scholars have found it difficult to reconcile the division of speculative philosophy offered in the commentary on the Isagoge with that contained in the De Trinitate. 30 The latter work supports the familiar Aristotelian division into natural philosophy, philosophy of mathematics, and first philosophy. In the commentary on Porphyry, a trichotomy is proposed upon the basis of the three classes of cognitive objects: intellectibilia, intelligibilia, and naturalia. The correspondence between intellectibilia and the object of theology or first philosophy is evident, as is the equivalence of naturalia and the object of natural philosophy. But it cannot be concluded with certitude that mathematics and the study of *intelligibilia* constitute the same science. Schrade suggests that mathematics is at least included under the latter term, which was meant by Boethius, however, to include in some way the movers of the spheres, daimons, and human souls. In its broadest sense, mathematics considers the power of numbers as concretized in the motion of the heavenly bodies. If music is embraced within mathematics, the latter discipline would also include the principles of harmony in the supramundane regions and in man himself. This would strengthen the relation between these two classifications, and would respect the intermediate and mediating position of music and mathematics in respect to the mind's ascent from sense objects to pure "intellectible" forms. Medieval commentators upon this text in the De Trinitate took Boethius' designation of the procedure in (music and) mathematics—disciplinaliter—to signify the demonstrative method, an interpretation which Schrade considers sound, in spite of the lack of philological evidence of any sort concerning the classical usage of this term. Music and mathematics grasp the form or imago as it is found in imagination, seek to render its ratio intelligible through the demonstrative use of intelligence, and thereby lead to a

³⁰ In Isag., loc. cit., pp. 8-9; Tr. I, c. 2, ed. Stewart and Rand, The Theological Tractates and The Consolation of Philosophy (Loeb Classics; London, 1926), p. 8.

world of objects which are subject to the laws of number. To be true to his search for being in its fullness, however, the philosopher must recognize the limits of their report, and so must pass on to a study of the wholly immaterial order and the true form, God.

IV. BOETHIUS THE PHILOSOPHER AND THEOLOGIAN

Although they were for long the center of a debate concerning their authenticity, the Opuscula Sacra of Boethius were studied by nineteenth-century critics chiefly with reference to the more famous Consolation of Philosophy. Typical of this treatment was the pagan system which F. Nitzsch professed to find in this latter work, the un-Christian nature of which he considered to be indubitable and a sufficient reason for rejecting the Tractates as spurious.31 In the wake of their philological and historical authentication, however, these works have been considered more closely for their own sake, because of the many doctrinal issues which they raise. This new appreciation of the value of Boethius' Opuscula was strengthened by the section devoted to them by M. Grabmann in the chapter on Boethius in his History of the Scholastic Method. 32 His remark that the Tractates are of even greater importance than the Consolation of Philosophy for the development of the Scholastic method, helped to restore a more balanced view of their doctrinal as well as methodological worth. The Aristotelian division of the philosophical sciences is set forth in the De Trinitate, which also foreshadows the Scholastic application of philosophical notions like number, the categories, and relation, to a profound theological problem. Here is also found the point of departure for the theory of the quaestio, which was fully developed by two of the commentators upon the Tractates. Gilbert de la Porrée and Clarenbaldus of Arras.83

Among the outstanding philosophical difficulties presented by the Opuscula Sacra is the determination of the exact meaning for Boethius of the binary of esse and quod est.³⁴ Students familiar with the Thomistic use of quod est and quo est (esse) as practically equivalent respectively to essence and existence were inclined to interpret Boethius in terms of this latter distinction. Without any formal discussion of the historical problem involved, this interpretation was

³¹ Das System des Boethius (Berlin, 1860).

34 Cf. especially the axioms in Tr. III, ed. cit., pp. 40-42, and Tr. II, 2, ed.

cit., pp. 8-10.

³² Die Geschichte der scholastischen Methode (2 vols.; Freiburg, i. B., 1909-11), I, 148 ff.

³³ On Boethius and the classification of the sciences, cf. L. Baur, Dominicus Gundissalinus, De Divisione Philosophie ("BGPM," IV, [Münster i. W., 1903]), 2-3, s.v. "Boethius"; summarized with regard to Boethius in K. Bruder, Die philosophischen Elemente in den Opuscula Sacra des Boethius ("Forschungen zur Geschichte der Philosophie und der Pädagogik," B. 3, H. 2 [Leipzig, 1928]), pp. 3-10. On Boethius and the theory of the quaestio, cf. Grabmann, op. cit., II, 424-30; Jansen, op. cit., pp. 69-75.

accepted by K. Bruder in his admirable examination of the philosophical elements in the Opuscula Sacra. 35 But already a decade before Bruder's study appeared, P. Duhem had cast doubt upon the correctness of this kind of exegesis, in a long excursus on esse and quod est in the fifth volume of his monumental The System of the World. 36 Although Duhem does not always prove a reliable guide in Scholastic matters, he has made a significant comparison on this question between Themistius and Boethius. He suggested that just as the former distinguished between a certain concrete water and the specific nature of water, so the latter understood quod est to be the really existing concrete thing, and esse to be the specific nature or form common to all individuals in the same species. On this reading, specific essence and form are identical, and are contrasted with the concrete individual. Duhem also indicated the historical steps whereby the esse of Boethius came at last to be taken as equivalent to quo est in the Avicennian sense of existence as distinct from essence. The history of the Boethian terms was followed in closer detail in the historical essays accompanying Roland-Gosselin's edition of the De Ente et Essentia of Aquinas. Fundamentally, Roland-Gosselin agreed with Duhem that existence does not enter at all into the Boethian dialectic, which involves rather a tension between the total essence (quod est) and one of its constitutive parts (the form or esse). The distinction in creatures is drawn between the first substance and its form, just as Boethius affirms the identity between substance and form in God.37

In a review of Roland-Gossèlin's work which appeared in Scholastik,38 F. Pelster drew the radical conclusion that it has been a falsely understood Boethius, even more than an Avicenna with his doctrine of possible and necessary being, who has been adduced in support of the Thomistic real distinction between essence and existence. This opinion served as the inspiration for a study on Boethius' concept of being which H. Brosch undertook under the guidance of L. Fuetscher. 39 In his discussion of Boethius' theory of knowledge, Brosch remarked that the Suarezian doctrine represents for him the form of moderate realism which has best answered the problem of universals.40 Although he did not extend his treatment to include directly a consideration of the medieval and later disputes about es-

35 Op. cit., supra, n. 32.

40 Ibid., pp. 87-90.

³⁶ Le Système du monde (Paris, 1917), V, 285-316.
37 Le 'De Ente et Essentia' de S. Thomas d'Aquin ("Bibliothèque thomiste,"
VIII [Kain, 1926]), 143-45; Roland-Gosselin is followed by A. Forest, La Structure métaphysique du concret selon saint Thomas d'Aquin ("Etudes de philosophie medievale," XIV [Paris, 1931]), 136.
38 III, (1928), 264.
39 Der Seinsbegriff bei Boethius, B. 4, H. 1, of Philosophie und Grenzwissenschaften (Innshruck 1921)

schaften (Innsbruck, 1931).

sence and existence, Brosch did say satirically that the difficulties encountered in attempting to explain how essence could be extramentally real for Boethius and still be really distinct from an existence which it does not have, leads to a mystery explainable no doubt only by the Thomistic principium quo. 41 This implicitly polemical import of Brosch's investigation led him to the extreme position of maintaining not only that Boethius himself did not teach the real distinction, but also that the appeal made by St. Thomas to the Boethian text was entirely without foundation. From a basic study of the relevant texts in Tractates I and III, Brosch concluded that here quod est signifies for Boethius the concrete essence, and quo est the abstract or formal essence. On the other hand, he allows that in the second commentary on Porphyry, esse is intended to mean existence. In the Consolation this term is not used univocally, being taken sometimes as esse essentiae and sometimes as esse existentiae. though the doctrine in the Opuscula represents a more personal stand than that in the commentary, and a more formal one than the incidental remarks in the Consolation, Brosch rightly warned that we must bear in mind that the Latin philosophical terminology of that age was not vet sufficiently fixed and unequivocal to provide a clear justification for any of the later Scholastic positions.

De Wulf and other students of the period have given general assent to the thesis of Brosch, but it is noteworthy that several more recent writers have seen the need to qualify his conclusions in some respects. J. de Vries, reviewing Brosch's work, makes the sensible remark that if it is true that the entire question of the relation between essence and existence was foreign to Boethius' intellectual horizon, then it is also true that he did not mean esse to be understood as pure essence exclusive of existence. 42 This observation is given positive formulation in a work by V. Schurr which will be examined more at length presently. Schurr notes43 that existential being is at least implicitly included along with essence in the latter part of the De Hebdomadibus, where Boethius treats of the production of real things by God and their flowing forth from Him by an act of His free will. Yet it is probable that even here Boethius did not have in mind a distinction between essence and existence. The concept of esse signifies for him now essence and now existence, but in general it has an "essential" orientation in the decisive texts. Recalling a statement by Duhem to the effect that Boethius did not effectively and formally distinguish between essence and existence, the Dutch historian of philosophy, F. Sassen, has sought to clarify the

⁴¹ Ibid., p. 94. ⁴² Scholastik, VIII (1933), 121. ⁴³ Die Trinitätslehre des Boethius im Lichte der 'skythischen Kontroversen' ("Forschungen zur christlichen Literatur- und Dogmengeschichte," B. 18, H. 1, [Paderborn, 1935]), p. 34, n. 61; p. 42, n. 77.

question in a valuable monographic study of the problem of being in the first period of Scholasticism.44 Before the ninth century, the term esse did not attain a technically stable signification, and the concept of being was not divided before that time into clearly distinguished notions of essence and existence. Hence Sassen suggests that esse should be given the neutral rendering of being, in order to avoid reading into Boethius a degree of precision which he did not possess in this regard. Yet the Thomistic appeal to Boethius in support of the real distinction between essence and existence was not wholly groundless, as C. Fabro has noted in his study of the Thomistic notion of participation.45 The anti-Thomistic polemic, whether waged by Olivi or by modern writers, has anachronistically supposed that there is no difference between a position which is in explicit opposition to the original features of Thomism and one which did not even pose the problem of creaturely structure in Thomistic terms. In Boethius, ens per participationem signifies the composition of matter and form in the order of substance, and not directly the composition of essence and the act of being in linea essendi. But Aquinas draws out in an original way the ultimate consequences of the possession of being by participation through his synthesis of Boethian and Avicennian concepts. Just as the unparticipated being of God must be pure form without admixture of potentiality, so must it be pure act of being without any receptive and finitely sharing subject; it must be an existence identical with its essence.

Many of the other problems met with in the philosophical and theological works of Boethius are given fresh formulation in V. Schurr's theological study of his doctrine on the Trinity, 46 a work of great importance for the historian of philosophy as well. By replacing the *Tractates* in the historical circumstances from which they rose, Schurr has not only substantiated their traditional ascription to Boethius, but has also established with considerable accuracy their chronological order and place in the tangled theological and political controversies of the early sixth century. In the course of his examination of the Trinitarian elements in the fifth Tractate Contra Eutychen et Nestorium, Schurr was led to revise in a more Aristotelian direction the account of Boethius' theory of knowledge proposed by Bruder. Basing his interpretation upon the passage in

45 La Nozione metafisica di partecipazione secondo S. Tomaso D'Aquino (Milan, 1939), pp. 95-99; cf. Brosch, op. cit., pp. 95-106, on participation in Boethius.

46 Op. cit., supra, n. 42.

⁴⁴ P. Duhem, op. cit., V. 307; F. Sassen, De Vraag naar het zijn in de eerste Eeuwen der Scholastiek ("Meded. d. konin. Ak. v. Wetens.," Afd. let., D. 83, S. A., N. 5, [Amsterdam, 1937]), esp. pp. 5-6, 15-21. Cf. Sassen's general study, "Boethius, Leermeister der Middeleeuwen," Studia Catholica, XIV (1938), 114 (where the view of Brosch is reported more favorably); p. 118 (where De Wulf's position concerning the Chartrian School is termed "not entirely unacceptable").

the Consolation47 where Boethius discusses the cognitive powers, Bruder holds48 that there are two completely independent ways of knowing: the first embracing the powers of sense, imagination, and reason, and the second being reserved for the purely a priori intellectual faculty. Whereas reason and its subordinate powers are directed empirically to the sense world, intelligence is independent of sense experience and has God as its primary object. Other things are known by intelligentia in an intuitive vision "from above" desuper spectans—through a divine illumination. Bruder recognizes Augustine as the proximate source of the Boethian theories of active perception, the occasional nature of sensation, divine illumination, and the independence of the higher powers with respect to the lower powers. Boethius' notion of intelligentia as a divinely aided power which has God as its direct object was appropriated by the School of Chartres for its explanation of the theological method of approaching the intellectibilia and for the mystical aspects of its theory of knowledge.

But in accord with his eclectic program, Boethius introduced a more Aristotelian account of the knowing process into his logical works and the Tractates. This feature of his epistemology has been stressed by Brosch and Schurr, 49 who remark that Boethius understands intelligence to be a function of reason rather than a separate faculty of knowledge. The polemic in the Consolation against the purely passive Stoic notion of cognition is not intended as a denial of the mind's dependence upon empirical objects, even when it is directed in natural theology towards the pure divine form. latter object is attained not through an a priori and immediate intuition, but as a consequence of abstraction and reasoning. This agrees with the Boethian solution of the problem of universals, although in both instances his final position is not perfectly consequential due to his neglect of Aristotle's theory of the agent intellect. similar medieval essays in synthesis, Boethius' attempt to reconcile the two traditional explanations of knowledge was not successful. and will apparently continue to give rise to widely divergent accounts of his true mind upon this matter.

More closely related with Schurr's main inquiry is his long discussion of the fundamental notions which enter into Boethius' famous definition of person in the fifth Tractate. 50 From his analysis of the meaning of nature, subsistence, and substance, both as these terms are employed by Boethius and in their historical development, it is

⁴⁷ Consolation, V, pr. 4.
⁴⁸ Op. cit., chap. 2, esp. pp. 17-18.
⁴⁹ Brosch, op. cit., pp. 81-83; Schurr, op. cit., pp. 46-50.
⁵⁰ Ibid., pp. 14-74.

evidently necessary to revise the usual accounts contained in the standard histories of dogma and in such reliable doctrinal works as de Regnon's studies on the Trinity.⁵¹ Schurr himself has promised a much-needed comparative history of the two great traditions of Augustine and Boethius which determined the course of Latin speculation upon the Trinity. The difficulties entailed by Boethius' definition of person as applied to the Trinity were recognized almost in his own lifetime by Rusticus. A preliminary account of the Scholastic disputes concerning this definition was provided by M. Bergeron,52 who has corrected and supplemented de Regnon at many points, especially as concerns the period from 1150 to 1250. During these years the authority of Boethius was restricted by the "theologians" to the field of philosophy, since they saw no reasonable way of avoiding the heretical conclusions of Gilbert de la Porrée, who presented his teaching as an authentic development of Boethius. The Thomistic rehabilitation of the Boethian conception of person was made through an application of the principle of analogy, construing the definition in terms of the Augustinian teaching on relation. This was in line with the general revaluation of Boethius undertaken by Aguinas. Although the materials for a study of the general doctrinal relation between Aquinas and Boethius have been uncritically assembled,53 this question still awaits a thorough exploration.

Finally, in the field of ethics, two recent investigators have independently noticed the Augustinian background of what has been happily termed the "Boethian equation" of goodness, God, and beatitude.54 The essential problem in Greek ethical theory was the nature of the summum bonum. Although the proposed solutions were often in conflict upon the scale of values necessary to determine the kinds of goodness, they agreed in the immanentist outlook which excluded a transcendent or ultimately religious solution. This is evident in the

51 Etudes de théologie positive sur le Sainte Trinité (4 vols.; Paris, 1892-98);

cf. esp. I, 227 ff.; II, 244 ff. Cf. also the criticism of Boethius offered by J. Tixeront, Histoire des dogmes (Paris, 1922), III, 350.

52 "La Structure du concept latin de personne," Etudes d'histoire littéraire et doctrinale du XIIIe siècle ("Publ. de l'inst. d'ét. méd. d'Ottawa," Vol. II [Paris, 1932]). Certain strictures which Bergeron, following de Regnon, has passed upon Boethius (art. cit., pp. 130-34), are based upon a misunderstanding of Boethian terminology. As Schurr has observed (op. cit., p. 56, n. 99), it is only the individual substance which is identified with the individual substance por with subsistence uponalifiedly in Tr V c. 3 ed. cit. p. 84, 11, 4.5

is only the individual substance which is identified with the individual subsistence, not with subsistence unqualifiedly, in Tr. V, c. 3, ed. cit., p. 84, 11. 4-5, and p. 86, 11. 23-24.

53 By E. Koplowitz, Uber die Abhängigkeit Thomas von Aquino von Boethius und R. Mose ben Maimon (Kallmünz, 1935); the Introduction of xxv pages is devoted to a survey of the doctrines which Aquinas owes in some way to Boethius, but no serious effort is made to weigh these points historically.

54 G. Capone-Braga, "La Soluzione cristiana del problema del 'Summum bonum' in 'Philosophiae consolationis libri quinque' di Boezio, "Archivio di storia della filosofia italiana, Vol. III (1934); R. Carton, "Le Christianisme et l'augustinisme de Boèce," Revue de philosophie, Vol. XXX (1930).

definitions of happiness proposed by the Stoics and Epicureans, as well as in Aristotle's notable attack upon the Platonic Idea of the good. Even Plato acknowledged that this Idea is unrealizable in this world. Consequently in the Philebus he located the supreme concrete human goodness in harmonized and self-sufficient activity of the soul, in the life of virtue and wisdom. That such a life is really insufficient unless it be dedicated to God as the highest personal good was the lesson which St. Augustine drew from his own experience as well as from his studies. The true lover of wisdom can only be the lover of God. This religious outcome of the search for happiness is the central theme of the Consolation, which includes all the sound affirmations of ancient ethical thought in a new and implicitly Christian setting. Like the Cynics and Aristotle, Boethius passes in review and rejects the lower sort of goods in which men commonly place their hope. All men seek happiness, which must consist in a state of perfection and autarchy, as the best Greek moralists taught. Beatitude. in a definition which has become classic, is termed by Boethius a perfect state inclusive of all goods. 55 These goods, moreover, are found in a united and perfect way only in the supreme good, which they presuppose and from which they flow. Hence the almost syllogistic conclusion that since God is the supreme good, and since happiness consists in the possession of this summum bonum, men are made happy only in possessing God as their final personal end. 56 Whatever Neoplatonic overtones are recognizable here, the governing principle in this restatement of the major problem in ethics is the Christian and Augustinian conviction that man is made for God, that his heart remains restless until it finds peace in Him, and that such personal union with the transcendent God is possible for us and, indeed, constitutes our only true happiness.⁵⁷ It is little wonder that Boethius was the textbook for the Christian West for a thousand vears.

Numerous specialized studies on Boethius have appeared during the half-century which has elapsed since H. Stewart's essay appeared, studies which are taken only partly into account in H. Barrett's little book on the time and work of Boethius.⁵⁸ The chief need at the present stage of scholarship is for a general work on Boethius from

56 Ibid., pr. 10.

⁵⁵ Consolation, III, pr. 2.

⁵⁷ In view of the religious import of the Consolation, K. Burdach's thesis of the philosophical humanization to which Boethius submitted Christianity cannot be accepted in the Renaissance sense of "humanization"; cf. Burdach's essay, "Die humanistischen Wirkungen der Trostschrift des Boethius im Mittelalter und in der Renaissance," Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte, XI (1933), esp. p. 547.

58 H. Stewart, Boethius: An Essay (Edinburgh, 1891); H. Barrett, Boethius: Some Aspects of his Time and Work (Cambridge, 1940).

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the philosophical standpoint which will give a comprehensive view of his life and doctrine, his relation with Greek thought, and his influence upon the growth and flowering of Scholasticism. And there also remains the equally pressing task of resolving some of the particular difficulties which have been noted in this survey of the present state of Boethian studies. In this work the historian of medieval philosophy will require the continued cooperation of students in allied fields who have studied other aspects of this many-sided mind.

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BEFORE YOU START TALKING ABOUT GOD ...

PART from those who deny the existence of God, all others who talk about Him assume some sort of metaphysic and, consequently, some sort of epistemology. It is this assumption which bears examination.

If we limit ourselves to "pure" positions, there is not a wide range of choice among metaphysical and epistemological doctrines. Metaphysics and epistemology are under either the aegis of Plato or that of Aristotle.

PLATONISM

Let being be described thus: being is fish, or fowl, or whatever else may be correctly defined. Such a description of being may be conveniently called an essentialist description, because essences are definable, and being is in the present hypothesis an essence.

Essentialism develops as an answer to the question which worried the hippopotamus:

A worried hippopotamus reflected with a sigh, How very strange that two of us make hippopotami, But if the hippopotami, how stands the matter thus That any hippopotami are hippopotamus?

The hippo's worry is twofold: first, why is the same essence-being, hippopotamus, two individuals? Secondly, why are the two individual hippopotamus?

THE ARGUMENT AGAINST ESSENTIALISM

It can be said straight off that if to be is to be an essence, there is no answer to the hippo's two worries. Take his first worry, why is the same essence-being, hippopotamus, two individuals? That question cannot be answered, precisely because, upon the assumption that to be is to be an hippopotamus, there is no definable difference in the hippopotamus which both individuals are. Thus the way from essence-being to individuals is effectively blocked.

Nor can essentialism allay the second of our hippo's worries, why are two hippopotami one essence-being, hippopotamus? In fact, far from allaying the hippo's second worry, essentialism will give him something else to worry about. The reason why essentialism cannot say why two hippos are one in being hippopotamus is this: even

supposing that two individuals are one in essence-being, nevertheless, since the two remain obstinately two, there must be some other essence-being which one hippo is and the other is not. Consider: there is a surplusage, a recognizable surplusage, in one hippo over the other; one hippo has something which the other has not if only because one is not the other. What is that surplus essence? At this point essentialism, by agreeing that there must be some surplus essence, advances a new worry. The reason is: this agreement turns the hippopotamus which both hippos by hypothesis are, into an hippopotamus plus something else, which only one of them is. And now the question is, how can one unit essence turn out to be two? That is something else for the hippo to worry about. Waving aside his worry over the fact that there are two, essentialism leaves him with a more anxious question, am I even an hippopotamus?

ARISTOTELIANISM

The simplest answer to the Platonism just described seems to be as follows. Since, upon the Platonic assumption that being is essence, one essence turns out to be at least two, or two individuals turn out to be one, the assumption must be false. Recall the assumption: to be is to be an essence which participates in some other essence outside the thing which exists. Deny that assumption. Lay it down that to be is to be the things which are. If these things which exist turn out also to be definable in terms of essence-being, what of it? At least the location of essences is properly fixed: essences are in, not outside, the things which exist. Upon the score of units, individuals or essences, turning out to be no units at all, there will thus no longer be any difficulty. This was the starting point of Aristotle's "smashing critique" of Platonic forms or essence-beings.

Whatever solution Aristotle may thereafter give to the problem of multiplicity, his solution will at least have the advantage of preserving the unity with which analysis must begin: the unity of individuals, the unity of essence.

Whatever an individual may be, it must, to start with, be an individual. If it is not an individual, we should never have anything which exists or can exist. Rather, we should apparently have several units in an individual, of each of which we should have to say that it, not the individual, exists or can exist. But this is only an apparent solution, because upon the Platonic assumption, we could not even say of each unit in the individual that it exists, since each unit would by hypothesis split into more units and these into still more, until not even unit essences could be said to exist, except upon the condition that each be itself plus something else. To come to that

¹ Aristotle, Metaphysics I. 9. 991a 12.

point is to say that being is, because it is itself; and is not, because

it is something else.

Accordingly, whatever one may say in criticism of Aristotle's destruction of Platonic forms, we must admit that Aristotle at least does not destroy the data, which are units.²

How is this possible? How may the data, beings and our knowledge of them, be preserved? The question is really two questions. How is it possible that our understanding, which is in terms that are universal, be of things which are not universal? Secondly, how is it possible that things be in fact individuals, whereas they are multiple in kind, multiple as individuals, multiple in the states of those individuals?

The Aristotelian principles of potency and act answer both questions. On the side of our understanding, those principles issue into the possible and agent intellect; on the side of things they issue into prime matter, substantial form, and a cause of the union of the two. This is not the place to explain these matters. Suffice it to emphasize the way Aristotle's theory preserves the data. Aristotle does not try to argue the many out of Platonic essence. The many, individuals or essences, simply will not be argued out of Platonic forms. Instead of summoning the many from the one by dialectic, Aristotle lays it down that the many are caused to be; caused by substantial forms, plus efficient, final, and material causes, in the realm of beings; caused to be known by the agent intellect and sensible things, in the realm of understanding. Since the Platonic travail, which attempts to deliver individual units or essence units from essence-being, proves abortive; since such an attempt, if successful,

² The Aristotelian preservation of the data implies of course much more. It implies a sound conception of the function of the human intellect. The Platonic intellect has over against it essence-beings. These and only these it knows with certainty. However, since essence-beings are each themselves compounded of more essence-beings, and since these additional essence-beings are as universal as, though of less extension than, the first, there is no trajectory either from essence-being to beings, or from our understanding of essence-being to our understanding of beings. There do not exist any universal units, howsoever more or less universal those units may be; thus there is no trajectory from essence-being to beings. Nor can we know beings in virtue of our knowing only essence-being; thus there is no trajectory from our knowledge of essence-being to our knowledge of beings. Thence it is that the Platonic intellect cannot understand beings and must resign itself to an ignorance of the world in which we live, the world of beings. The world in which nobody to date has ever lived, the world of forms or essence-beings, is the native habitat of Platonic intelligence. Aristotle will have none of it. According to him we know things, and if what we know of things is known universally, what of it? That can only mean that universals are somehow in things, not as parts of an aggregate, but as that which the things "out there," the things alive and kicking, are. If our understanding of those things is a universal understanding, that obviously means only that our understanding is universal, not that things are universal. In short, the way we understand of them, that the things are.

would not give us a theology, Plato has given us no theology. Has Aristotle a theology?

Aristotle's explanation of multiplicity presupposes the existence of the units whose multiplicity it explains. Grant Aristotle man A, he will explain how man B puts in an appearance, viz., by being generated. Grant Aristotle a sad man, he will explain how the same man becomes glad, viz., by change. Grant Aristotle the fact of true knowledge, he will explain knowledge as caused by the agent intellect, which renders the sensibles intelligible. Refusing to start with beings, Plato can never reach them. Refusing knowledge any cause within the human intellect—recall his theory of reminiscence, which merely puts off the answer—Plato cannot wind up with any knowledge which is recognizably human. Aristotle begins with the data: beings and our knowledge of them. He then proceeds to explain how we get more beings by generation, and more knowledge by abstraction, reasoning, and judgment. It is a strong position and it can develop into an epistemology on the one hand, and into a

metaphysics crowned by a theology on the other. It can, but does it?

There is no evidence that the Aristotelian First Mover makes the units to exist. The Aristotelian First Mover makes the units, which exist, to be more units. If essentialism identifies beings with essences, Aristotle is not an essentialist. If however, essentialism supposes, without explaining, the existence of different units, Aristotle is that far forth an essentialist. Give Aristotle existents and he will explain how they proliferate. How name such a position? I suggest that it is existentional-essentialism: existential, because it starts with existents; essentialism, because the First Mover causes only the proliferation of the units, not their existence, and when existence is not caused, things must either exist under the pressure of the only intelligible factor there is in them, viz., some essence factor, or else the origin of the existence of things must not be deemed a pertinent question. There is no contradiction in all this. Aristotle simply never asked the question why there are units rather than not. His question was rather why are the units, which are assumed to exist—why are they prolific?

CHRISTIAN PHILOSOPHY

Christians asked the question why are there things rather than not, and they asked the question because they were told that once upon a time there was nothing but God and that He made everything.

At this point Christianity came into philosophy—quite a different statement from saying that philosophy came into Christianity. Christians accepted by their faith the fact of creation. Could they know this also by reason? Could they prove it?

³ Cf. St. Thomas Aquinas, In Lib. de Causis, 1. 18.

ST. AUGUSTINE

To prove it Augustine had two resources, his faith that God made the world and his Platonism. Augustine's faith made him aware of creation. His Platonism made him think that to be was to be an essence.⁴ Augustine knew quite well that Platonic ideas could not create beings. But if he retouched them, if he changed the Platonic ideas into divine ideas, could they then create beings? Obviously they could, but then they were no longer Platonic ideas. They were the creative ideas of God. The creative ideas of God were now to make beings. What sort of beings? Essence-beings, since for Augustine to be is to be an essence. Here we have on the one hand a divine cause, quite up to the task of creating. On the other hand we have essence-beings, quite below the role they are supposed to play, the role of being created.

ARGUMENT AGAINST AUGUSTINISM

Essence-beings cannot be created either in nature or in human knowledge. It is flatly impossible to make essence-being to exist. God cannot make animal to be. He makes this thing, which is an animal, to exist. If indeed one wishes to say that the things which God makes are intelligible, and in that sense God creates essences, that is a comprehensible statement. To say, however, that essencebeing, not the things which have essence-being-can exist-this is to say that individuals, which are the only existents possible, are essences. Plainly, individuals are not essences, because individuals are many and their specific and generic essence is one. Moreover, essence-being cannot be put ready-made into human knowledge. If it were so put there, it would be given over to knowledge, and we should have nothing to do with its formation. This is to deny the collaboration of the human agent in its work of knowing. It is nevertheless a fact that what we know depends initially upon what we feel, see, taste, etc., and it is a fact that our sensations depend upon the things sensed. It is impossible that such knowledge, which we collaborate in causing, be caused in us without our collaboration.5

Despite that impossibility of squaring the creation of essence-being in nature or in knowledge with the known facts, namely that only individuals exist and that we co-operate in forming our knowledge, let us nevertheless assume the contrary to both propositions. Let us assume, first, that essence-being does exist. The result of this assumption is that such being is as helpless to act as it is helpless to exist; because before there is operation there must be something to

⁴ Cf. Etienne Gilson, God and Philosophy (New Haven: Yale Univ. Press, 1941), p. 61.

⁵ No doubt God can infuse knowledge, but infused knowledge is by hypothesis not our doing.

operate. Unable to exist, essence-being can exercise no causality. It can do nothing. Assume, secondly, that essence-being is created in our knowledge. The result of this assumption is that we exercise no causality in knowledge, because there is nothing for us to do.

Putting the two results together, we see that essentialism is the denial to creatures of causality both in nature and in knowledge. This denial is known as ontologism, and it is the inescapable result of a consistent, whole-hog, Platonism.

THE ONTOLOGICAL ARGUMENT

Let us now see what a "proof" of the existence of God looks like under the manipulation of ontologistic or essentialist assumptions.

An essentialist assumes that our intellect, in order to know, need not first be fecundated by the causal impact of an existent, maritans sinum cogitationis; nor does he assume the causality of the agent intellect which makes sensibles intelligible. He assumes that we start with the knowledge of essence-being; then he tries to integrate with that knowledge of essence-being whatever additional knowledge may thereafter accrue to it. For example, he will try to integrate with our knowledge of universals our knowledge of singulars; with our knowledge of the possible he will try to integrate our knowledge of the actual; to knowledge of the necessary he will hitch knowledge of the contingent; to our knowledge of essence he will suffix our knowledge of the existent. The knowledge of the universal, of the possible, of the necessary, of the essential; that is all given. It is subsequent knowledge which must be explained. Thus, in essentialism, existential factors are not known first, whereas essential factors are known afterwards; rather, it is the other way about.

This being so, let us now see how an essentialist integrates with our knowledge of essence-being the knowledge that God exists. The investigation may be limited to the essence-existence relation, because it is there that is generated an essentialist theology. The essence of God is to exist. This we can know. True, our knowledge of essences which are not God does not include a knowledge of their existence. Nor is it relevant that many men do not know that the essence of God is to exist. The point is that one can, and many do, conceive an essence whose nature it is to exist. If such be the knowledge of this one essence, whereas knowledges of other essences do not include the knowledge of their existence, it must needs be that in knowing an essence whose nature it is to exist, we also know that such an essence in effect exists. The "proof" of God's existence is as simple as that, to an essentialist. We know that God exists, because we must conceive an essence, whose nature it is to exist, as in fact existing.

ARGUMENT AGAINST ONTOLOGISM

The matter is not as simple as that to an existentialist. An existentialist assumes as the only valid starting point of knowledge the knowledge of existents. On the side of our knowledge of existents is to be ranged the knowledge of the sensible, the singular, the actual, and the contingent. It is with these knowledges that must be integrated our knowledge of essence, of the intelligible, of the universal, of the possible and necessary. Existentialism begins with the knowledge of being, and it must find in that knowledge the explanation of knowing the other factors of being. Essentialism begins with knowledge of essence, and thereafter introduces, as well as it can, into the knowledge of essence the knowledge of existence and so on. Essentialism, having cut the placental cord which ties knowledge to being, is most certainly right in saying that the knowledge of a being whose essence it is to exist is knowledge that such a being exists. But if that cord may not be cut, if there be no more in our knowledge of essences than what is put there by our knowledge of things, if the essences of the things we know are not God but sensible quiddities, if even our knowledge of being as being is a product of experience, how then can an existentialist find in his knowledge. which comes from the things he sees, the knowledge that God, whom he sees not, exists? He cannot. He cannot, that is, find in his knowledge of one whose essence it is to exist any more than knowledge that one who must be, necessarily must be. This is far different from finding that such a being exists. It is finding only that such a being must be thought to exist.

THE REQUISITES OF PROOF

An existentialist must prove that God exists, and proof for him is not merely a causality of knowledges, by which, e.g., the knowledge of a being whose essence it is to be, causes the further knowledge that such a being exists. Such causality leads us merely from one knowledge into another knowledge. Proof for an existentialist is also based upon a causality of being, because his knowledge, to start with, is caused by being. Here then is the difference between essentialism and existentialism in the matter of proof: essentialism conceives proof only as a causality of subsequent knowledge by prior knowledge. Existentialism conceives proof as an instance of the causality of being, because the caused sequence of knowledge is the caused sequence of being which is known.

The point must be made clearer. Proof for both essentialism and existentialism is a linking of the unknown to the known with the result that the unknown becomes known. For example, let it be unknown who was the first to cross the bridge; let it be known that of all who crossed the first man alone had a wooden leg. Find the

man with the wooden leg and you have found the first man to cross. Thus, the identity of the first man to cross is revealed in knowing who had the wooden leg, because it is known that he was the first to cross. Both existentialist and essentialist would try to find the man with the wooden leg. It is not in the direction of their search that their notion of proof differs. It is rather in what each turns up with at the end of the search. The essentialist turns up with the knowledge of an individual with a wooden leg; the existentialist turns up with the individual himself, wooden leg and all, because it is of him that we have knowledge when we have it.

If the example seems loaded in favor of the existentialist, let us take one seemingly, but not really, less favorable. Assume as unknown that man is an animal; assume as known that a sentient being is an animal. Find that man is sentient and you have found that man is an animal. Here, as before, there seems to be no difference in the direction of the essentialist's and existentialist's search: both try to find that man is sentient. Nor does there seem to be any difference in what each would turn up with: both would turn up with a universal proposition, man is sentient. Now, since that universal proposition is about essences, would it not seem that here at least the essentialist is right? After all, universal propositions express the relations of essences, and such relations are true irrespective of existents. The point which essentialism urges becomes even stronger in the case of mathematicals: two and two is four is not only true even if four units do not exist; it is also true despite the fact that four units, as numbers, cannot exist. Is not, therefore, the essentialist right in maintaining that proof moves merely from knowledgecause to knowledge-effect, precisely because there is nothing more in man is sentient or two and two is four than knowledge and true knowledge at that? Certainly existents are not in these propositions, if they be true even if there were no existents; and they are true even in the absence of existents; besides, mathematical propositions are true despite the fact that their objects, number and shapes or figures, cannot exist.

It may come as a hard saying, but the essentialist is not right. Universal propositions express the relations of essences no doubt. Nevertheless, since the relations of essences which they express are based upon the related essences themselves, the whole question comes to this: exactly what do we grasp when we grasp an essence? Existentialism answers: essence is the end product of a noetic of these two phases: (1) We apprehend an existent. (2) We apprehend in an existent an essence, that is, what the existent is. Such, in fact, is the course we take in knowing the universal, the intelligible, the possible, the necessary. We know, first, the singular, the sensible, the actual, the contingent. It is they plus the agent intellect

which cause our knowledge of the universal, the intelligible, the possible, the necessary. Thus, we know species and genus (universals) from having known this instance of them; we know "what animal is" (an essence) from having known what this animal is: we know that that can exist (the possible) which we have known does exist; we know that what we have first known to be cannot, while it is, not-be (the necessary). True, we may form propositions concerning essences of things which we have never experienced: there are possibly mountains of pure gold, for instance; but we cannot do that until we have experienced mountains and pure gold.

An essentialist noetic conceives the matter differently. Essence, the universal, the intelligible, the possible, the necessary, all these are known upon the occasion, not because, of experience. All these knowledges pop before the mind, not as purely mental products (chimerae), nor as coming from the experience of beings, but pop before the mind whensoever experience stimulates but does not cause them.

As is clear the radical difference in the two positions is this; existentialism maintains that beings and the agent intellect cause our knowledge of them; essentialism maintains that being, if you will, "causes" our knowledge, but that being is essence-being. Since an existentialist will maintain that essence-being is not being at all, and that knowledge merely of essence-being is not knowledge of being at all, he will charge an essentialist with knowing, not things

as they are, but things as they are known.

Which is right? It depends simply on this: is or is not being, i.e., that which exists or can exist, an essence? One might also say that it depends simply on this: do we or do we not have knowledge of being, i.e., knowledge of that which exists or can exist? There is no proof for either the yes or the no to those two questions. But one who says yes to the first assumes the apories of essentialism. Yes, being is an essence, essentialism maintains. It follows that to exist is to be, say, a fish, because fish is an essence; then what about the beings which are not fish? If they are beings, yet are not fish—whereas fish is being, what are they? One who says, no we do not know what exists or can exist, but rather we know objects in which, to start with, existence is not given, finds himself in the position of knowing, not things, but something or other in the realm of an ideal world; he knows not being, but being as known.

There is no proof either that things are or that we know them. There is simply evidence both that beings exist and that it is they which we know. There is no disproof either that being is essence or that our knowledge of essence is disconnected with existents. There is simply lack of evidence that it is so. All the evidence is on the side that there are things and that we know them: we feel, see, hear, etc. them, and we do have science about things. There is no

evidence that being is essence or that what we know is essence, known apart from having known existents: and there is plenty of trouble ahead for one who maintains that being is essence and that our knowledge is not of being but purely of essences.

Although, as has been said, there is no proof that it is being, not essence, which exists and of which we have knowledge, even in our knowledge of essence, there can nevertheless be proof that being A exists if being B exists and we know it. There is no proof that anything exists if, as essentialism maintains, being is essence and if in

knowing essence we are cut off from knowing being.

There can be proof that bad oysters made you sick if the oysters were bad and you were sick; but you cannot prove the oysters were bad or that you were sick. You can only say, smell the oysters and let your queasiness bear witness to your sickness. You cannot prove that bad oysters made you sick if both you and the oysters are inexistent essences, and if your knowledge of them is a knowledge, not of being, but purely of essences. Obviously one may say that the knowledge of bad oysters, eaten, leads to the knowledge of a sick eater, but that does not prove that the bad oysters really did the job, not unless you and the oysters are somewhere else besides being in knowledge; not unless you and the oysters exist.

As to proof in which all the propositions are essential, e.g., sentient beings are animal, man is a sentient being, man is an animal, the case is pretty much the same. An existentialist maintains that these relations of essences are based upon essences, that essences are known from our experiential contact with beings, and that is why the proof holds in the order of being. Cut off from existents at the very start, essentialism must say that man is sentient in knowledge alone. Existentialism maintains that man is sentient in knowledge,

because man is sentient in fact.

Even the truth of mathematical statements is not, in existentialism, quite unconnected with existents. True, mathematical truth does not depend wholly upon existents in order to be known as it is known; but it depends somewhat upon existents in order to be as it is known, or, if you will, in order to be known as it is. Take the number four and the nature of cones. The knowledge of these does not depend wholly upon existents in order to be known as they are known. The number four and the nature of cones are not known as these four and as this cone as a condition of their being known as four and as a cone; nor are they known as four hot cones or as a flabby cone as a condition of their being known as four and as a cone; nor, finally, need they be known as four oxen or as a paper cone in order to be known as four and as a cone. Mathematicals are known apart from knowing singular or common sensible matter, and apart also from knowing particular intelligible matter; and as so

known they exist only in knowledge, not in things. But mathematicals are not known as they are, nor are they as they are known, apart from some knowing of existents. Numbers and cones, as they exist in themselves, must be discontinuous or continuous stuff. Now, stuff is existential. Moreover, in order to exist in knowledge mathematicals must carry along with them into knowledge the knowledge of stuff, although what their stuff is need not be particularized. Thus, in order to know mathematicals it is not necessary to know them as (1) these—singular sensible matter, nor (2) as sensible (the hot, the cold, etc.)—common sensible matter, nor (3) as kinds of beings (man, paper, cabbage, etc.)—particular intelligible matter. Nevertheless, in order to know mathematicals as they exist or can exist it is necessary to know them as unities or natures of unspecified stuffcommon intelligible matter. Whence, we should never know mathematicals unless we had experienced quantity, continuous and discontinuous. Where quantity cannot be experienced, because there is none, as in angels, we must roundly admit that no counting or picture drawing is possible. Our counting of angels is as if they were material countable units, and our picturing of them is not notably successful.

In sum, existents are a necessary presupposition of existentialism in order that proof may prove. Existents must introduce an object into knowledge and maintain it there. Existents must introduce an object into knowledge, else we cannot explain an evident fact: we know things. Existents must maintain objects in knowledge, else we cannot say what can and must be—this is science—because we never would know what actually is. In mathematicals the wedge which existents drive into knowledge is very small indeed: it is uncharacterized stuff; but without that tip there would be no knowledge of numbers or shapes or figures. Indeed, without that tip metageometries and meta-arithmetics would be meta-nothing.

ST. AUGUSTINE

To get back to Augustine, it is not to the point to deny that he was an essentialist or ontologist. In a very real way he was not. But he borrowed from Plotinus, a real essentialist, the helpless sort of being which essentialism proffers. Having such being on his hands, by way of creation of course—in that he was not an essentialist—Augustine although he does not think so, is at a loss to make his essence-being go to work. Essence-being and essentialist knowledge have really nothing to do. Augustine nevertheless strives to make his essence-being do something. In the realm of nature the causality of essence-being will be the causality of seminal principles. In the realm of knowledge the truth of our judgments involving

essence-being will be caused by divine illumination. The question remains, can the doctrine of seminal principles and divine illumination secure the causality in nature and knowledge which St. Augustine so much desires? Most certainly Augustine intends that it shall: "Accordingly He [God] so governs all the things which He has created that He also allows them to exercise and perform their own movements."6 Are his intentions fulfilled?

The doctrine of seminal principles is this: the effects of nature are put into nature by God at the first moment of nature's creation. Thereafter those effects issue from nature pretty much as peas from a pea-shooter. Under the impact of stimuli out they pop, not as something really new, but as something whose appearance alone is new; the effects were there, latent in their causes, all the time. The doctrine of divine illumination is this: the truth of those judgments which are called nowadays essential judgments, is caused by God.

ST. THOMAS AQUINAS

St. Thomas Aguinas rejects both theories in principle, because "if inferior agents do no more than bring out, from their concealment, into the open the forms and the habits of virtues and of the sciences, by way of removing the impediments which covered them over, it follows that no inferior agents act except accidentally."7 Clearly, St. Thomas thinks that if the effects of nature are simply under wraps within their causes, there is no true causality of the supposed agents.

In particular St. Thomas rejects seminal principles, because they destroy passive potency or prime matter, a necessary factor in the explanation of substantial change.8 Divine illumination he rejects, although he keeps its name, because it dispenses with our causality in the formation of our knowledge. "It does not seem probable," he writes, "that there be no principle in the rational soul by which it can fulfill its natural operation; and that would be the conclusion if a single agent intellect were posited, whether it be called God or an intelligence."9 The knowing agent, St. Thomas thinks, produces its own truth, and the instrument by which the knowing agent does this, the human intellect, is divine illumination.10

⁶ De Civit. Dei, VII, 30; P.L., XLI, 220.

^{**} De Civit. Dei, VII, 30; P.L., XLI, 220.

*** De Ver., XI, 1 resp.

*** ST, I, 115. 2 resp. et ad 4.

*** II Sent., d. 17, 2. 1 sol.: "et ideo, remotis praedictis erroribus." Cf. In III de An., lect. 1, n. 10: "non enim homo esset a natura sufficienter constitutus, si non haberet in seipso principia quibus posset operationem complere, quae est intelligere; . . . unde perfectio humanae naturae requirit quod utrumque [intellectus possibilis et intellectus agens] eorum sit aliquid in homine" mine."
10 ST, I, 84. 5 resp.

AUGUSTINE'S ARGUMENT

Let us now suppose St. Augustine furnished with a knowledge whose essential truth comes from God. The question is, how may such knowledge demonstrate the existence of God? Take any essential truth, say seven and three are ten. That truth is necessary: seven and three must be ten; it is eternal: seven and three are always ten; it is immutable: seven and three can be nothing else but ten. Whence come those attributes of essential truth? Certainly not from ten existent units, because they are contingent, temporal, mutable; nor from the mind, because it also is contingent, temporal, and mutable; besides, the mind sees, it does not make, essential truth. The mind, therefore, in seeing that seven and three are ten must see, not God—He is not ten units, nor creatures—they have no such characteristics as essential truth possesses, but see a truth which participates in the Truth which is God.

The points to notice in the Augustinian demonstration are two. First, seven and three are ten is a truth given over to us; we do not make, though we do recognize or formulate, that truth. Secondly, the truth of essential propositions is not the truth which is God, nor is it the contingent, temporal, mutable truth of creatures. This being clear, it follows that the mind, in discovering absolute, essential truth, has discovered something which, transcending creatures and the mind, must be itself transcended by the Truth which is God. Essential truth, which is not God, has such characteristics as only God, whom such characteristics imitate, is.

ARGUMENT AGAINST ST. AUGUSTINE

If St. Augustine is wrong on one point, his alleged evidence of the existence of God is no evidence at all. Let these four statements be marked off: (1) Things are contingent, temporal, mutable. (2) Our minds are contingent, temporal, mutable. (3) The truth of essential propositions is not from things nor from the mind. (4) The truth of essential propositions participates in the Truth which is God. There is nothing debatable about propositions 1, 2, and 4. The difficulty lies in proposition 3, and it is this: how exactly can the truth of seven and three are ten be neither a creature, nor the mind, nor God, and yet be at all?

Obviously, anything not God must, if it be at all, be a creature. Any Christian metaphysic must agree to that. Yet the truth of seven and three are ten is, according to St. Augustine, neither God nor a creature. Just where, in the Christian dichotomy by which whatever is not God is a creature, and whatever is a creature is not God, just where does seven and three are ten fit?

ST. THOMAS AQUINAS ON ST. AUGUSTINE

St. Thomas discusses the matter apropos of the number six because Augustine had remarked that if the creatures which God made in six days were non-existent, nevertheless six would still be a perfect St. Thomas first points out that if there were no existent sixes, there would not be-careful man-any existent sixes. Next, he remarks, six can be taken as an idea in God, where, because it is not a creature but rather a divine idea of a creature, it is the same as God Himself. Then comes the crucial point: what is six apart from its being a divine idea of a creature and apart from its being a creature, i.e., six existents? It is, he answers, an absolute consideration of the number six. Absolute consideration, he explains, is a consideration in which six is viewed neither as six existents nor as the thought of six. In this absolute consideration six is not six existents, because six is six, whether there be six things or not; nor is six the thought of six, because six is six, whether we think six or not. Absolute thus means freed from the conditions of being six things and of being the thought of six. In that absolute state the only thing true of six is simply and solely that it is six. Absolute consideration is knowledge which abstracts six both from the state of being six existents and from the state which six assumes in our knowledge of six, the state, namely, of being thought of. Now comes the delicate point: that absolute six, although it is considered as being neither in nature nor as being in knowledge, is nevertheless, precisely because it cannot be so considered except by considering it, only in knowledge. The absolute six is thus in knowledge alone in the sense that it is never found outside its status of being understood, although the fact that it is understood is irrelevant to the fact that it is six which is understood. Seven or eight or ten, etc., could be understood just as well.

The point just made has immense significance in relation to proof, whether of existence or of the possibility of existence, because it is a denial of Augustine's third proposition: The truth of essential propositions is not from things nor from the mind. St. Thomas is saying in effect that absolute natures, e.g., the nature of six, upon which are erected absolute judgments, are from the mind and things. He is saying that we cause our knowledge: that six is not the absolute six, nor are seven and three ten, etc., unless there be someone thinking those truths; he is saying that six is six and seven and three are ten in thought. He is saying that we make the truth of our knowledge, not in the sense that what we make we can also unmake, e.g., make the true (six is six) false (six is not six) or vice versa,

¹¹ Quodlibet., I, 8, 1.

but in the sense that unless we make it the knowledge will not be made, i.e., we shall not have true knowledge. The fear of idealism which such a position might inspire arises from idealism itself. True knowledge, although it be our own making, is knowledge of being; being is the stuff, the food of knowledge. Once grant that, and, as we have seen, that is a fundamental evidence in existentialism, we cannot thereafter dissociate the knower from the known, the object of knowledge from the intellect which knows. Precisely because idealism does dissociate the knower from the known, knowledge from its object, precisely because it can no longer effect their juncture, idealism thinks that existentialism is doing the same thing when it says that the knower makes his knowledge and its truth. Not at all. This is no dissociation being practised here by extentialism. We do indeed cause our knowledge and its truth, but the effect of our causality is to know being, precisely because there cannot be, for an existentialist, any true knowledge unless it be of being: we cause the knowledge and truth which being causes us to cause. Proof, therefore, for an existentialist is by means of middle terms, which are existential principles of the things known. These terms are not, as in essentialism, essence-beings, which come neither from the mind nor from things; they are essences of beings, if you will, which come from the intellect, because being has furnished the intellect with the stuff, the essence of an existent, actual or possible.¹²

reample, if we make the truth of our knowledge, how can that be consistent with the apparent fact that the truth of some of our knowledge is eternal? For example, the nature of a circle and "three and two is five" are always true, before, during, and after our supposed making. How then can we make what was true before, and will be true after, our making? St. Thomas, existentialist if ever there was, answers in general terms that "the truth of enuntiables is nothing else but the truth of the intellect." In particular he becomes brusquely curt: "Created truth is not eternal." (ST, I, 16. 7 resp.) The nature of a circle and "three and two is five" has eternity only in God's intellect. That and that alone, viz., God's intellect, is eternal truth. Our truth is not eternal. Nor can one argue that universals, because they are everywhere and always the same, are eternal. Universals are eternal only in an eternal intellect if any; they are not eternal upon the score of being abstractions from time and place. Essentialism makes another attempt: take any proposition, true here and now; it was always true that the presently true proposition was to be true; whence, at least a proposition concerning a future event is eternal. Not at all, answers St. Thomas, a future event will occur by reason of a cause. Take away the cause, and a proposition concerning a future event is not true at all. Now, only God is eternal. Whence, the only grounds for the truth of a proposition concerning a future event is in the eternal cause of that event, God. Essentialism makes a last effort: truth has no beginning and no end: no beginning, because if it began, it was true before that beginning that there was no truth. St. Thomas answers: since our intellect is not eternal, neither is its truth. The truth of our intellects began, and before it began, certainly one can say that it did not exist; but the only one who can say that is God; we could not say that, not being there to say anything. Obviously, we can say now that once upon a time our

These things being so, exactly what does it mean to speak as we do, of eternal truth?¹³ The eternity of truth, St. Thomas explains, and, with due regard for differences, the explanation holds for the necessity and immutability of truth, may mean that the content of certain truths is eternal, or that the means by which we conceive truth are eternal. Those means are, intelligible species, phantasms, and the agent intellect. These means are not eternal. The content of certain truth is eternal.

Right there lies the delicate point. Is not St. Thomas saying exactly the same thing as St. Augustine said and as Plato said before Augustine? Is not the starting point, namely, the content of eternal truth, the same for all these men? In what precisely does that probative link between eternal truth and God, viz., the content of eternal truth, differ as between essentialism and existentialism? It differs in this: the content of eternal truth in essentialism is an essence content, what things are. Now, the knowledge that God exists does not form a part of, does not enter into, the knowledge of

truth was non-existent; nevertheless that present statement of ours is true by a present truth, not by a truth which antecedes our knowledge and is not God's knowledge either. Only an intellect can apprehend that it is true that something did not exist, and the only intellect which can do that with an eternal truth in its apprehension is God's.

Essentialism exerts further pressure upon the score that truth is immutable, whereas our minds and things are mutable. Truth, answers St. Thomas, is not immutable (loc. cit., art. 8). Truth is the conformity of the intellect with the things understood. Vary either term and let the other stand: let a be b; let a man who thought a is b now think a is c; or, let a man think that a is b, whereas a is no longer b but is now c. In both ways there is change from truth to falsity. Of course, if there be an intellect which cannot change, the truth of that intellect is immutable. Whence, "the truth of the divine intellect is immutable, but the truth of our intellect is mutable," not indeed because truth is the subject of change, but because the truth of our intellect is. It would be tedious, perhaps, to go on with objections to the position that the truth of our intellect is mutable, whereas, only the Truth which is God is immutable.

Truth which is God is immutable.

Tedious also would be St. Thomas' account, here and now, about the necessary. Suffice it here to say that just as he absorbs the eternity and immutability of truth into the eternal and unchangeable God, so also does he absorb the necessity of truth into the actuality of the divine essence. Throughout his argument he is pleased to speak as if St. Augustine were agreeing

with him throughout. Perhaps he does.

with him throughout. Perhaps he does.

St. Thomas does not agree with an essentialist notion of truth, and because he does not, he does not agree with an essentialist notion of proof. Truth, St. Thomas lays it down, is the known conformity of the intellect with the things understood. It is well to mention right here that truth is only in the judgment, and hence only judicative knowledge can be true knowledge. There is only inchoative truth in concepts. The whole discussion assumes that true knowledge is judicative. Now, our known conformity with the things understood, our truth, is not eternal; it began and ceases with our thought. It is not immutable, not that truth itself is subject to change, but our truth is subject to change; sometimes we are right, sometimes we are wrong. Nor is our truth necessary: it need not have been at all, much less need it have been necessarily. All these characteristics, eternity, necessity, immutability, are characteristics of the Truth which is God.

13 Sum. c. Gent., II, 84, ad quod vero secundo dicitur. 13 Sum. c. Gent., II, 84, ad quod vero secundo dicitur.

any essence. Obviously, we can understand a thing in terms of what it is, say man or four without involving ourselves in understanding also that there is a God. The reason is: an efficient cause is not a part of a thing's nature or essence. But—here is the point existentialism makes, we can not understand the being which is in the content of truth except we understand it as derived from the divine being.¹⁴

What is St. Thomas saying here? He is distinguishing (a) what a thing is, i.e., essence, and the knowledge of essence, from (b) that which exists or can exist, i.e., being, and the knowledge of being. He is saying (a) that essence is not being; it is what a being is. He is saying (b) that the knowledge of essence, since it is not knowledge of being, is still less knowledge of another being, viz., a cause. On the other hand, (a) that which exists or can exist is being, and (b) knowledge of being, since being, if limited, must have a cause, can involve one who knows limited being in knowing also the cause of limited being.

There is a world of difference here between truth as essentialism and truth as existentialism conceive it, the difference of a Platonic from an existential world. The difference lies in two dimensions: in the dimension of the truth of being and in the dimension of the truth of our knowledge concerning being. In a Platonic world the truth of being is eternal, etc., because at bottom being is essence, and essences are eternal. The truth of being in an existential world is eternal and temporal, necessary and contingent, immutable and changing, because being is eternal and temporal, etc. Paralleling this difference as between Platonic essence and existential being there is a difference between the Platonic and existential truth of our knowledge concerning being. Knowledge is of two sorts: conceptual and judicative. The essentialist concept of being prescinds from the "ising" of the "isers": that is, the concept does not signify the act of existing, actual or possible, of a subject of that act; it signifies only a subject, with a significance which neither includes nor excludes an actual or possible act of existing. Existential conceptual knowledge of being does signify the act, actual or possible, of a subject of the act of existing. The difference between essentialist and existentialist judgments is this: in essentialism a true judgment affirms or denies that an act of existing is in a subject which represents either real or purely conceptual being; existentialism understands a true judgment as affirming or denying that the unity of the subject and predicate does, or does not, exercise an act of existing, actual or possible. Thus in existentialism the act of existing signified in the concept of that which is or can be, is known in and by the

¹⁴ De Pot., 3. 5, obj. 1 et resp.

judgment to be effectively exercised in the actual or possible order, both of which orders are existential. Essentialism maintains that a true judgment affirms or denies "ising" of a subject—of what?—of "ising"? no, because "ising" was not included in nor excluded from the concept of a subject of existence. Of what, then? Of a subject which, because "ising" was neither excluded nor included in the concept of that subject, is not a subject of, but is, being.

The content of the truth of existential knowledge is being: being which is signified in the concept, and which is signified and affirmed or denied as exercised, in the judgment. The content of essentialist truth is an adamantine lump of essence, the essence of being, because being is an essence. Chesterton once mournfully remarked that if Aunt So-and-So was not a person, then who is? So here: if being is not that which exists or can exist, then what is being? If our knowledge of being which is conceptual is not knowledge which only signifies something which is or can be; and if our knowledge which is judicative is not knowledge which both signifies and affirms or denies that something exists or can exist; then what is knowl-

edge of being knowledge of?

The nature of proof depends upon how we understand the content of truth. Assume with existentialism that the content of knowledge is being. That content grows by reasoning, which discovers a new truth (induction), or draws out (deduction) from an imperfectly known truth better knowledge of it. In either case the conclusion of existential reasoning is a truth which affirms or denies that its content is or can be, because the antecedents of that conclusion concerned being. Essentialist conclusions no more concern being than did the antecedents of those conclusions; they concern essences. Let there be this proposition (deduced or induced), man is an animal. Essentialist knowledge understands that proposition to identify man-animal with being, i.e., it conceives that to say man is an animal is the same as to say that man-animal exists or can exist, because man-animal is being. Existentialist knowledge understands that proposition not as identifying man-animal with being: it is not because being is or can be identified with man-animal that man is an animal. Being cannot be identified with essence, else to be would be to be man-animal, and then there is nothing else left over for being to be, e.g., being could not be inanimate. Man is an animal, for existential knowledge, means that existence, actual or possible, must be associated, not identified with, an essence, because the data of experience have demanded that association. Thus, man is an animal truly states what that is which is or can be, but the statement is not true because being is identified with essence; it is true because we find that truth in the data of experience (induction) or draw it (deduction) from principles which come also from experience. It should by now be

apparent what existentialist proof is: it is the caused sequence of knowledge which duplicates the caused sequence of being, because

knowledge is of being.

Let us illustrate what proof means by proving, and let our example of proof be drawn from "eternal truth," since it is this sort of truth in which the difference between existentialist and essentialist proof is crucial. Let there be an eternal truth: two and two are four. First of all, it is evident that there are four things. There is no proof of that. Secondly, it is self-evident that if there are four things, there can be four things. There is no proof of that. Thirdly, it is neither evident nor self-evident that to exist or to be able to exist is to be or to be able to be four. Not evident: because we see fives, sixes, ships and shoes, and sealing-wax, etc. Not self-evident: because if to be or to be able to be were necessarily to be or to be able to be four, there could be nothing else but four. Why, then, is being four and why can being be four? That being is four is evident: that it can be four if it is four, is self-evident. The question is, why is it to four that being accrues or can accrue? There are only these answers: (a) we don't know, (b) being does not accrue to four, (c) being accrues to four from a cause. Answer (b) identifies being with being four. It is an impossible answer. Answer (a) must be withdrawn by one who sees that (1) four exists and can exist. (2) four does not and cannot exist solely because it is four. One who admits these two points must admit that four exists because it is made to exist, and four can exist because there is a cause able to make it to exist. In either case, there is a cause which makes or can make being to be four. This (c) is proof: in the ontological order its factors are effect and cause: in the order of knowledge, it is the knowledge of the being of a datum (an effect or cause) which involves us in knowing that there is a cause or effect of the being of that datum.

Not that our present concern is to prove God's existence from eternal truth or from anything else. Our present concern is to show what proof is. Since in history if not in philosophy we first meet with an attempt to prove God from the characteristics of scientific knowledge, e.g., its eternity, necessity, etc., we must, in order to see if such proof will work, go at once to the point at issue: of what do we have true knowledge? Of being, both parties agree. What is being? Being is the existence, actual or possible, of an essence, existentialism maintains. No, protests essentialism, being is the essence of an existent. Similarly for knowledge: true knowledge, in existentialism, is knowledge which affirms or denies the existence, actual or possible, of that which has an essence. It is the other way about in essentialism: true knowledge affirms or denies the essence of an existent. If, now, we stuff those terms with intel-

ligible content, the difference will become more apparent. Let an essence be six.15 Essentialism maintains that six is necessarily, immutably, eternally six; that six existents have not those characteristics; that God is not six. Whence, there must be a being which overtops six just as six overtops things and our mind. Existentialism's blunt answer to that is this: six does not transcend things or our mind. We know six from having known six existents, and six, considered as being apart from six existents and our knowledge of six, exists nowhere except in knowledge, precisely because neither six nor anything else can be considered apart from six things and the knowledge of six, except in knowledge. Whose knowledge? Ours if we are around to do any considering. If we are not, the eternal truth of six is the eternal truth which God is. "And this is eternal truth."16 "The truth of enuntiables is nothing else but the truth of the intellect . . . whence if no intellect were eternal, no truth would be eternal, but because only the divine intellect is eternal, in it alone does truth have eternity. Nor does it follow from this that something else is eternal besides God; because the truth of the divine intellect is God."17 Proof in existentialism thus moves from the characteristics either of being or of the knowledge of being. It is the last sort of proof which has been our immediate concern, because essentialism raised the question about proof from the characteristics of knowledge. However, it was necessary to see in one case the requisite of proof in either case. That requisite is being, in nature or in knowledge.

Without that requisite there is no proof of anything at all, because there is no trajectory from knowing essence, which is not being, to knowing being, which is not essence. Once more let it be recalled that there is no proof that there is being and that it is being we know; there is simply evidence. On the other hand, there is no proof of anything if proof must be proved or if essences are beings.

f essences are beings.

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¹⁵ Quodlibet., VIII, 1, art. 1.
16 De Ver., 1. 5 ad 2. Cf. De Pot., 3. 5 ad 2.
17 ST, I, 16. 7. Cf. I Sent., d. 19, 5. 3; De Ver., 1. 3 ad 3; 1. 5 ad 2 et ad 16; De Pot., 3. 5.

BOOK REVIEW

Methodology of the Social Sciences. By Felix Kaufmann. Oxford University Press, New York, 1944. Pp. vii + 272. \$3.50.

The controversy on methodological questions in the social sciences which has never completely subsided in almost half a century, has in recent years been stimulated again by a number of important books on the subject. Though written and/or published in this country, their authors are, significantly, mostly European-born scholars such as Robert M. MacIver, Pitirim A. Sorokin (cf. Mod. Schoolman, vol. XXI, No. 4, pp. 234 f.), Karl Mannheim, and now Felix Kaufmann. Kaufmann, before coming to this country as a refugee, was legal adviser to Austrian petroleum interests and simultaneously Privatdozent at the University of Vienna. There he taught, stimulated by the famous Viennese jurist Hans Kelsen, philosophy of law. However, if we can "pigeonhole" him at all, we might characterize Kaufmann as a disciple of the great phenomenologist Edmund Husserl rather than as one of the Neo-Kantian Kelsen. Since 1938 he has been professor of philosophy of the Graduate Faculty of the New School for Social Research in New York, consisting mainly of refugees and forming, in a way, a European university on American soil.

Kaufmann's book is not what, in its title, it promises to be. Most of its contents is pure philosophy, especially epistemology and logic of science. Written by a mathematical and juridical minded logician, its language is so extremely technical as to make its reading a tedious job, at least for the social scientist not too familiar with the principal issues of logic. Often the German diction seems to be shining through the English text; sometimes the terminology and style appear even somewhat affected, that is to say, unnecessarily bookish and artificial. Certain propositions are presented in the form of equations or with the use of symbols, which rather than to render understanding easier, is apt to make it more difficult for many readers.

Of another book in this field, viz., Ernest Greenwood's Experimental Sociology, this reviewer said (Am. Cath. Sociological Rev., Oct. '45) that it is virtually devoid of philosophy, dealing almost exclusively with the technique of social research. Kaufmann's book goes to the other extreme: of 228 pages of text, 138 are devoted to general methodology or, more correctly, to the logical analysis of scientific procedure in general, and only some 88 pages to methodological issues in social science. Yet even this second part is not a positive study in "method" in the current sense of the term.

Kaufmann insists, and rightly so, that some of the most persistent controversies over methods in the social sciences are deeply rooted in the general problems of the theory of knowledge. But the question is whether, for that reason, a "methodology of the social sciences" should concentrate on epistemology and on the history of doctrinal struggles. Or, whether a book dealing primarily with the logic of empirical science and such problems as the nature of physical laws and causality, truth and probability, the relation of biology and psychology to physics, value judgments, etc., should sail under such title.

One of the chief objectives of this book, according to the publisher's announcement on the dust jacket, is to determine to what extent the social sciences should adopt the methods of the natural sciences. According to Kaufmann, all attempts to base empirical science on ultimate grounds conceived as self-evident truths, are foredoomed to failure. Empirical science (other than mathematics) should be conceived of as nothing but an accepted body of procedural rules, its content or "corpus" consisting of synthetic propositions admitted under these rules. Truth of synthetic propositions is to be defined in terms of possible human experience only. Synthetic propositions compatible with the procedural rules of a science and, therefore, in-corporated in that science, are called "empirically valid" rather than "true" in terms of deductive logic and analytic propositions. Hence, empirical science does not strive to attain absolute truth; decisions in empirical science are subject to permanent control, and hence may have to be reversed. Considering the social sciences as empirical science, Kaufmann thinks that the assumed differences in method and procedure between physical and social sciences have been exaggerated.

In part two of his book the author applies his general methodology to some of the more important methodological issues in the social sciences. He discusses, e.g., the controversy between behaviorists and introspectionists as well as the difference between physical and social "laws," the objectivity and value of judgments in the social sciences, the relation between social theory and social practice, the method of isolation in economics, etc. He approaches all these questions first of all as a logician, i.e., his first concern is to clarify issues before deciding them. He is forever trying to detect misconceptions, inadequate formulations, and pseudo-propositions. There can indeed be no doubt that failure to make clear distinctions, that mistakes in the formulation of issues and confusing of essentially different types of argument and reasoning have obscured many a controversy. Kaufmann does not easily take sides with any of the opposing schools in the methodological controversies. In a quasi-scholastic method he first refutes the fallacies in the arguments of both sides and then tries to ascertain in which respect, if any, either group is right. More correctly, whenever he has convinced himself that issues have been confused by pseudo-philosophical arguments or have been inadequately formulated, he tries first to prove that the problem is insoluble as stated. In a second step he attempts to re-formulate the issue in a logically satisfactory manner. Since empirical science is regarded as not concerned with ultimate explanations and absolute truths, "reconciliation" between opposing schools appears often to be possible without intellectual sacrifice on either

It is strange that the important, and again and again posited question, regarding the subject-matter of sociology and its place among the sciences is nowhere discussed in Kaufmann's book. Surprisingly little is said about the German concept of Geisteswissenschaften and its cognitive ("verstehende," interpretative) method, though there was ample opportunity to do so in Chapters 11 and 13; W. Dilthey and W. Sombart have not even been mentioned. When discussing the idealistic-totalitarian and organicist social doctrines which hypostatize society into a substance, Kaufmann uses the term "universalism" without reference to his former Viennese colleague, Othmar Spann, who coined that term and is generally considered the most prominent representative of the corresponding social philosophy (cf. O. v. Nell-Breuning, S.J., Reorganization of Social Economy, Milwaukee, 1936, pp. 86, 207 f, 223; Rev. W. Schwer, Catholic Social Theory, St. Louis, Mo., 1940, pp. 165-168, et. al.). Kaufmann should have taken into account the fact that in English

Universalism denotes a Protestant theological doctrine so that a special explanation is necessary if the term is applied to a social philosophy.

In conclusion we wish to say that the tone of Kaufmann's book is gratifyingly unprejudiced and conciliatory. On p. 129 it is mistakenly stated that the Schoolmen adopted the Platonist doctrine of the body as the "prison of the soul"; on p. 257 St. Augustine is cited as a representative of medieval philosophy.

In chapter 17 Kaufmann reviews some of the chief results of his analyses and summarizes them in 29 theses. The notes (pp. 245-263) are very inconveniently arranged. To look up a citation one has always first to check to which chapter the looked-for note or source belongs. Consecutive enumera-

tion would be much more convenient.

The book and its conclusions are a real challenge to Catholic philosophers. Catholic social scientists, especially sociologists and economists, are badly in need of a clarification of the formal object of their respective branch of learning and they look to their Catholic colleagues in the field of philosophy to help them solve their methodological difficulties. Kaufmann's book presents quite satisfactorily many of the issues concerned, clearing them up for a final solution as it were. He completes many of the "elliptical formulations" (to use his pet term) of methodological problems, but his own book remains itself "elliptical": it does not give us a constructive methodology of the social sciences.

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Basic Writings of St. Thomas Aquinas. Edited and annotated with an Introduction, by Anton C. Pegis. Random House, New York, 1945. 2 vols. Pp. liii + 1097 and xxxi + 1179. \$7.50.

The United States of America is entering upon a most important period of its development. Spiritually, our nation and its leaders and prospective leaders stand in need of a sound philosophical basis for their intellectual, artistic, and religious life. Dr. Pegis' presentation of the basic writings of St. Thomas in an attractive form and at a reasonable price should be of immense value in fulfilling this need. I should like to congratulate Dr. Pegis and to thank him for making the wisdom of Thomas readily accessible to the students of America.

Hector Berlioz once wrote that no one who had not produced a work equal to the "Eroica" should dare to criticize Beethoven's symphonies. Adherence to such a view, it seems to me, might—happily or unhappily—result in the extinction of all critics. Certainly it would preclude any attempt on my part to criticize Dr. Pegis' compilation. As one, however, who would not make such a rigoristic demand on a critic, I am going to propose two suggestions for making Dr. Pegis' excellent work even more suitable for bringing the men and women of America to the "contemplatio veritatis."

The first is concerned with the selection of texts. Nothing, of course, could be better than the presentation of a large part of the Summa Theologica. But, like all masterpieces, the Summa Theologica has a very definite organic unity of thought. It may be doubted, therefore, whether it is advisable to remove the questions in this work which establish the foundation for moral philosophy and replace them with parts of the Summa Contra Gentiles. Some of the chapters of the Summa Contra Gentiles, it is true, deal with the problem of the end of man and aim at establishing a philosophy of human conduct. The fact remains, nevertheless, that neither the style of the Contra Gentiles nor the overwhelmingly abundant development there encountered have the force and clarity of the lapidary style and the austere procedure of the Summa Theologica. Furthermore, it was probably by reason of the length of the passages quoted from the Contra Gentiles that Dr. Pegis unfortunately found it necessary to omit the entire tract on the "passions." I say unfortunately because, as we are all aware, it is precisely in the treatise dealing with the passions that Thomas establishes a number of his theories on human conduct. Indeed I should say that the profound and penetrating tract on habits in the Summa Theologica which follows the consideration of the passions, and which is, no doubt, one of the greatest contributions Thomas ever made to the science of moral philosophy, is not fully intelligible without an understanding of the questions on the passions. This is made clear in ST, I-II, 57.

Again, although Dr. Pegis has given us part of the treatise on Faith, he has seen fit to leave out the passages concerned with Charity. This omission strikes me as faulty; for Thomas, being a realist, never lost sight of the existential order as it is, not as it might have been. He would, I feel sure, have regarded it as impossible to get a true picture of his realistic world when the very crown of the virtues—that without which there can be no perfect virtue and no possibility of attaining the end—has been omitted.

The second suggestion has to do with the mode of translating the Thomistic word esse. I am sure that Dr. Pegis will agree that the distinction between essence and esse is of supreme importance in the philosophy of St. Thomas. Mr. Gilson calls it "a fundamental institution" (Spirit of Mediaeval Philosophy, p. 425), and explains that it is absolutely essential to the fabric of Thomism. For this reason the word esse (the "to be" or existence) is one of the most frequent expressions in the vocabulary of Thomas. It is often used substantively, not to designate being, but the act of being, that is, the "to be" or existence. Now it seems to me that by translating esse as being we place our readers in an equivocal position. For if esse means existence in the sense of "to be," it means being only when predicated of God since only in God are the act of being (esse) and being identical—God is the Ipsum Esse. Moreover, in view of the fact that Dr. Pegis also translates the word ens as being, for one reading only the translation the danger of not distinguishing between ens and esse is very real and may lead to regrettable misunderstandings. I am aware that the Dominican translation which Dr. Pegis largely follows is responsible for this faulty reading, but I had fondly hoped that Dr. Pegis would correct it.

Allow me to quote one or two texts (similar instances occur in almost every question) to show what difficulty such translation may create in the minds of students, unless these are forewarned by a teacher who has read the original Thomas and understands his thought. The italics in the quota-

tions are the reviewer's, except for substance in the first quotation.

In ST, I, 3. 5 ad 1, we read: "The name substance signifies not only what is being of itself [per se esse]—for being [hoc quod est esse] cannot of itself be a genus, as has been shown; but also signifies an essence to which it belongs to be [esse] in this way—namely, of itself, which being [esse], how-

ever, is not its essence."

And in ST, I, 75. 6: "For generation and corruption belong to a thing in the same way that being [esse] belongs to it, which is acquired by generation and lost by corruption. Therefore, whatever has being in itself [esse per se] cannot be generated or corrupted except in itself; while things which do not subsist, such as accidents and material forms, acquire being [dicuntur fieri] or lose it [corrumpi] through the generation or corruption of composites. . . . But being [esse] belongs to a form. . . And thus, matter acquires actual being [esse in actual] according as it acquires form . . ."

To avoid these ambiguities, I hope that in the next edition Dr. Pegis will see fit to follow Mr. Gilson's lead in translating esse by the "to be." Such a change would make this valuable and important book much more valuable in and out of the class room. I have offered these suggestions because I am convinced that we can teach Thomas from Thomas to our American students, and that the Basic Works which Dr. Pegis has so carefully

edited is going to be our text book in the future.

HENRI RENARD, S.I.

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THOMISTIC BIBLIOGRAPHY: 1920-1940. By Vernon J. Bourke, Ph. D. The Modern Schoolman (Supplement to Vol. XXI), St. Louis, 1945. Pp. viii + 311. \$3.00.

This work is as good as it was necessary.

The Bibliographie Thomiste, published in 1921 by Fathers Mandonnet and Destrez, O. P. (Le Saulchoir, Kain, Belgique), listed 2,219 items pertaining to the life, works, and thought of St. Thomas Aquinas. Indispensable as that bibliography was and is for Thomistic scholars, it needed the supplement

of the items published since 1921. True, one could find the 1921-1940 items of a Thomistic bibliography scattered through several philosophical journals, but it is a difficult job to hunt and hunt and hunt. Dr. Bourke's work happily

dispenses Thomistic scholars from that tedious job.

The Thomistic Bibliography is very well done. Under five major categories (I. Life and Personality of St. Thomas, II. Works, III. Philosophical Doctrines, IV. Theological Doctrines, V. Doctrinal and Historical Relations) there are, in the table of contents, many sub-divisions. Within each sub-division, in the text, items are listed alphabetically under the names of the authors, anonymous works heading each list. There are four indexes: an index of the proper names of authors, of anonymous works, of periodicals and collections, of symbols of cited works. Besides, the Introduction contains the chronology of St. Thomas' life and a chronological list of his works. All this makes for a facile use of the book. Suppose, e.g., you wish to learn what has been done on a certain subject, say, education. Look at the table of contents under Philosophical Doctrines; under that head you will find Educational Theory; turn to page 108; there it is. Or suppose you wish to learn what a given author has been saying about St. Thomas in the past twenty years; look at the Index of Authors; there, after his name, you will find the serial number of each of his works; look for these serial numbers in the Bibliography; there his works are listed.

Besides the excellence of the plan and its execution, the physical make-up of the *Bibliography* is very commendable; good print, good paper, and easily

discernable hierarchy of type.

Dr. Bourke and The Modern Schoolman deserve the hearty thanks of all Thomistic scholars for this piece of work.

GERARD SMITH, S.J.

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Philosophical Understanding and Religious Truth. By Erich Frank. Oxford University Press, New York, 1945. Pp. 209. \$2.50.

When Emmanuel Kant wrote his Critique of Pure Reason, it is supposed by many that he philosophically destroyed the power of the human intellect to grasp any truth that transcends sensible phenomena. If his critique is assumed to be valid, metaphysical and religious truth are beyond the powers of the speculative intellect of man. Whether this critique be valid or not, it posited for Kant, Kantians, and the modern thinkers who follow Kant, the great problem of philosophical understanding and religious truth. Kant essayed a reconciliation by his defence of the validity of the Practical Intellect for supersensible truth. The subsequent history of thought, and the modern prevalence of positivism and philosophical agnosticism on the one hand, and of religious agnosticism and sentimental fideism on the other, attest his complete failure to reconcile the two. It is this problem of the speculative intellect and its object, and religious truth, raised by Kant and left unanswered by him, that Erich Frank attempts to solve anew in Philosophical Understanding and Religious Truth.

It is not always clear just what the author means by religious truth. In the first chapter he would seem to give it the meaning understood in some form of sentimental and pious fideism. In subsequent chapters, at times he would seem to make it mean such metaphysical conclusions as the existence of God, creation, freedom, which he describes as necessary "assumptions" for philosophical speculation. In this sense, he maintains that even the

Positivist must have assumptions and therefore a religion. His thesis, then, seems to be: all philosophical speculation demands certain necessary presuppositions and assumptions; if therefore one accepts these religious truths as assumptions, philosophical understanding will not be opposed to religious truth but rather religious truth can be demonstrated through philosophical principles. In the fourth chapter the author attributes the power to grasp religious truth to the imagination. Just what is the nature of this faculty, he never clearly tells us. It is obviously distinct from the external senses, since it grasps the past, and out of the materials of its past experience it can

creatively project its idea into the future.

The author has a vast acquaintance with the field of the history of philosophy and he brings it all to bear on the solution of the present problem. Each chapter contains numerous references to the ancient Greek Philosophers, to those of the Middle Ages, and to the thinkers of the modern tradition; and each chapter is followed by copious notes quoting from and giving accurate citations from these philosophers. But the author is unable to transcend his Kantian bias and prejudice, both in his own thinking and reasoning and in his interpretation of the authors cited. It is difficult therefore to see how, in this new defense of his thesis, he has added anything substantial to Kant's defense of the same thesis, or how he can hope to be more successful than the father of modern agnosticism in philosophical and religious thought.

The author is philosophically an essentialist; for him existence is a category of being and he cannot understand the existential character of St. Thomas' metaphysics. If his book proves anything, it is another material demonstration of the inadequacy of an essential philosophy to comprehend

the truth of existing reality.

I should recommend the book as an outstanding example, excellently done, of the contemporary scene in philosophical and religious thinking. The author is masterful in handling a system in which the intellect can immediately grasp the complex relations of a demonstration but must assume the first principles of that demonstration; in which there is no difficulty for the senses to know a sensible fact, while the higher power of intellect cannot see but must "believe" intellectual truth.

The book contains six chapters: 1. "The Nature of Man," 2. "The Existence of God," 3. "Creation and Time," 4. "Truth and Imagination," 5. "His-

tory and Destiny," and 6. "Letter and Spirit."

JOHN J. O'BRIEN, S.J.

St. Louis University

INNER LAWS OF SOCIETY. By Don Luigi Sturzo. Translated by Barbara Barclay Carter. Kenedy, New York, 1944. Pp. xxxvi + 314. \$3.50.

This is not a new work from the pen of Don Sturzo. It is a translation from the original Italian of what has been, perhaps, his most influential work.

It is best known in its French translation, Essai de Sociologie.

This is a book concerned entirely with principles. It is not easy to read. This is partly due to the philosophic character of the discussion, partly to the abstract terminology, partly to the translation. Whatever effort is required of the reader will be amply repaid by the penetrating light with which Sturzo's powerful mind illumines the basic principles of society.

The first part of the book is an analysis of the Forms of Society: the three primary forms, the family form, the political form, and the religious form; and the secondary forms, economy, the international community, and

particular societies. The second part of the book deals with the Syntheses of Sociality: authority and liberty, morality and law, duality and diarchy, the trend towards unification and the modern state, resolution and transcend-

It would be unwise to single out any one part of the discussion as especially worthy of consideration. The book needs to be read wholly and read with close attention. As with any work concerned primarily with principles a careless reading could easily result in a misinterpretation of the author's mind and with an attribution to him of views which he repudiates. Thus when Sturzo defines the function of the political form as order and defense, the superficial reader might easily infer that Sturzo is a defender of the theory of the "negative" state. It is necessary to understand what Sturzo includes in the term "order." He means far more than the suppression of violence. He means "the guaranteeing of order in all social relationships, whether ethical or affective, economic or cultural"; and "this guarantee is moral, juridical, and coercive" (p. 62).

The fact is that Sturzo is equally opposed to integral communism, to statalism, and to economic liberalism, because all three of these systems and

philosophies are opposed to the inner laws of society.

Because of the enthusiasm with which Hayek's new Bible of the N.A.M. has been greeted in certain quarters, Sturzo's warning against "the modern conception of an autonomous and scientific economy" is especially timely: "No one disputes that economics, founded as it is on physical elements and forces, is likewise subject to the laws of the material world. Yet, the human factor, with his intelligence and will, shares in economic causality as principal agent. By his efforts man succeeds in regulating it and, it may be, even in dominating it, on the whole, making it serve his needs. The synthesis of the two factors, man and nature, gives us human economics, neither wholly free nor wholly deterministic. Ethical, psychological, and political values in economics play the most important part. The study of pure economics, as if it were the study of the courses of the stars or of the speed of light, has its uses for ascertaining its fundamental laws and for the analysis of causes. The real synthesis is never that of pure economy. We must beware of the facile mistake (as easy in economics as in philosophy) of confusing the theoretical abstract with the concrete reality, and, precluding any efficacious human intervention, letting it be believed that an economy has an autonomous and deterministic structure" (pp. 97 f.).

GEORGE DUNNE, S.J.

Santa Barbara, California

FREUD, MASTER AND FRIEND. By Hanns Sachs. Harvard University Press, Cambridge, Mass., 1945. Pp. 195. \$2.50.

There can be small doubt that Sigmund Freud has left his impress upon the modern world of thought. It is highly questionable whether his influence has really profited the world, and it is problematical how permanent it will be. But for almost fifty years it has been widespread, and, in many quarters,

it has been very deep.

Freud was a colorful man, one to whom others could not be indifferent, whether they knew him personally or only through his writings. They reacted powerfully to the impact of his personality. Hence, it is not surprising that the comparatively few biographies which we have of him are saturated with strong emotions. In many of these writings the obvious emotions have been critical and antagonistic. But the little volume under review is characterized by a laudatory spirit that often verges upon the

idolatrous. The author says, for example: "anyone who feels compelled to defend or worse still to beautify and whitewash his ideal, is not a true worshipper at the shrine of his deity" (p. 9). In another place he writes: "I simply could not believe that he (Freud) was made of the same clay as others. Some special substance had been infused into him and gave the finished product a higher grade of perfection" (p. 128). Nor does the author feel that "the thorough lack of objectivity, which I profess freely and cheerfully," unfits him for his task any more than it disqualified Boswell from writing of the Johnson whom he 'idolized.'

Doctor Sachs was an intimate friend of Freud, who knew and admired him for many years, and who was one of the first and most trusted of the selected inner circle of psychoanalysts. His portrait of his friend is subjective, sympathetic, and uniformly flattering. Much of the praise which he lavishes upon Freud is amply deserved, for Freud had many estimable traits in character and in his personal life and he seems to have been genuinely sincere in his convictions. But Sachs' estimate of his hero would not be universally acclaimed. His description of Freud as a "fighter" against critics of his system and against former disciples who deserted his camp, is much more flattering to Freud's self-control and unbiased search for truth than is the judgment expressed by others of his biographers. They have painted a picture of a stern, sour individual who brooked no opposition and little criticism, who, with the intolerance of a tyrannical schoolmaster, scowled on everyone who showed the least disobedience. One primary purpose of Sachs' book is to show that this legend "has absolutely no foundation in fact."

The work does not enter into an explanation of psychoanalysis but its principles and methods consistently tinge the author's interpretation of persons and facts and determine the nature of his theorizing. Nor does he offer any defense of psychoanalysis for he is thoroughly convinced of its truth and, occasionally, his words imply that any thoughtful man should share his conviction. Little is said of Freud's writings, since they lie open for the world to read.

The book is interestingly written. What precise effect it will have on its readers only time will tell. It will never be a best seller, it was never intended to be. It will be read by those who already have an interest in Freud or in Freudianism. It will vastly please Freud's friends; it may modify the opinions of some who now regard him harshly; it will very likely seem to others as being overdrawn and, hence, will leave them unimpressed. In respect to many statements, they may wonder what part is the expression of actual, historical fact and how much is due to the personal predilection of the author.

It is admirable for a friend to present the object of his affectionate admiration in the most favorable possible light. It is well that a man who has so deeply left his stamp upon his generation as has Freud should be depicted from different angles. We must still wait, however, for a portrait of Freud that will strike a balance between the extremes of the "furor biographicus," between the exaggerations of both violent enemies and of fulsome friends.

RAPHAEL C. McCARTHY, S.J.

St. Louis University

Essays in Modern Scholasticism in Honor of John F. McCormick, S.J. Edited by Anton C. Pegis. Newman Bookshop, Westminster, Md., 1944. Pp. 295.

This volume of essays was originally intended to commemorate the seventieth birthday of Father John F. McCormick, S.J. It was to be an expres-

sion of the affection felt by members of the American Catholic Philosophical Association for this staunch supporter of their work. After the death of Father McCormick on July 14, 1943, some months before his seventieth birthday, the essays were published as a memorial of his philosophical labors. The essays were originally printed as articles in *The New Scholasticism*, but have now been collected into a volume and printed in a limited edition by the

Newman Bookshop.

It is no small tribute to a teacher of philosophy to be honored by such a memorial, and Father McCormick's superb record as a teacher of philosophy is worthy of the tribute. The essays contained in the volume are well done and make the book a worth-while memorial. Father Phelan's article on the formal object of metaphysics is a very stimulating blow in defense of the existential character of that science, but its extreme brevity makes one wish to hear much more from the author on that subject. Dr. Pegis has a very interesting article on the proper relation of Saint Augustine and Saint Thomas as philosophers, but the article demands a knowledge of his other work on the intrinsic character of the Platonic position in order to be rightly appreciated. Father Gerard Smith's treatment of Avicenna and the question of the possibles successfully disposes of Avicenna's theory, but his exposition Saint Thomas' position in the matter seems to have been confused by an excessive attempt to avoid any trace of Avicenna's error. The other essays cover a wide variety of subjects, and are soundly developed. The volume concludes with Mrs. Clare Riedl's delightful recollections of Father McCormick, and a bibliography of Father McCormick's writings.

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FACT AND FICTION IN MODERN SCIENCE. By Henry V. Gill, S.J. Fordham University Press, New York, 1944. Pp. 136. \$2.50.

Readers of the Irish Ecclesiastical Record, The Month, Studies, and Thought will recall the frequent contributions from the pen of Father Gill on subjects scientific, religious, and philosophical which have appeared in these periodicals from time to time during the past few years. Fact and Fiction in Modern Science is a collection of several of these essays into a single volume. The purpose of this collection is to indicate the scope and tendencies of present-day physical science as seen from the view-point of Catholic philosophy and

thought.

Since this book is a collection of essays, it has no one thesis but only a general subject, the relation between science and religion. Each essay treats of one particular phase of this general subject independently of the others. While this division of subject matter into independent essays makes for many needless repetitions and a certain incompleteness in the handling of the implications which follow from the points established, it should be noted that the several chapters possess a degree of inter-relation and logical progression from topic to topic. There is, therefore, a co-ordination of the whole, if not into one study, at least into a series of graduated studies. The style is popular, the language simple, free from technicalities. The "facts" to which reference is made in the title are clearly and objectively set forth. They consist in expositions of the nature and content of physical theories and hypotheses. Among the "fictions" might be mentioned dogmatic conclusions drawn from insufficient data and popularizations of science in which hypothesis is presented as proven fact. Intermediate between the facts and the fictions are several passages presenting the attitude of the Church toward science, spiritualism, and evolution.

From the standpoint of the facts presented, this book is well worth reading. The chapters on entropy, determinism, and uncertainty are excellent as explanations of these laws of physics. But a presentation of facts and an explanation of physical laws is not Father Gill's main purpose in writing this book. He is chiefly interested in the conclusions of scientists as regards such questions as the existence of God, the presence of supernatural forces at work in the universe, and the origin of life. He optimistically reports that scientists of today no longer have the narrow materialistic outlook so characteristic of their confrères of the nineteenth century. But he scores these same scientists of today for confining their search for truth to the one field of science. It is his opinion that truth is one and that any sincere searcher after truth will perforce make use of all sources of information in his quest. While it is true, he says, that science has progressed apace in its discovery of the secrets of the universe, it can never give us a thoroughly satisfying theory of that universe so long as it insists on alienating from itself the truths of philosophy and revelation. Father Gill does well to commend any recognition of spiritual values on the part of scientists, but he can hardly blame them for not arriving at a philosophical proof for the existence of God. The scientist considers the how of nature, not the why. it is only by a consideration of the why of nature that man can conclude to the existence of God. Father Gill, however, jumps into the breach, showing scientists that from the second law of thermo-dynamics (entropy) and from the physical impossibility of spontaneous generation they can arrive at the existence of God as a strictly logical conclusion drawn from the teachings of modern science. A physical proof of this sort is an appealing argument because it is so easily understood. Unfortunately, however, the conclusion of such an argument is no stronger than the hypothetical premises from which it is drawn. True, Father Gill recognizes this weakness and goes on to indicate the traditional proofs from causality and finality, but it is questionable whether even these proofs, as here presented, lead to anything more than to God the great watchmaker and master mathematician. From this standpoint, therefore, the essays in this book fall short of presenting a true study of the relation between science and religion.

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